

THE
Art of Logick;
OR, THE
ENTIRE BODY
OF
LOGICK
In ENGLISH.

UNFOLDING
To the meanest Capacity the
Way to dispute well, and to refute
all Fallacies whatsoever.

The Second Edition, corrected and amended.

By Zachary Coke of Grays-Inn, Gent.

Am. 1. 17. Πᾶσα δόσις ἀγαθὴ, καὶ πᾶν δώρημα τέλειον ἀνθρώπῳ ἐστὶ
καταβαῖνον ἀπὸ τοῦ πατρὸς τοῦ φωτός, παρ' οὗ καὶ ἐνὶ παραλλαγῇ, καὶ
τετραπλῆς ἀποκρίσματος.

Multi multa canunt admiranda, haud sat credenda.
Cato Lib. 3. Distich. 17.

LONDON,
Printed for John Streater, and are to be sold by the
Book-sellers of London, 1657.

Art of Logic;

OR, THE

ART OF THINKING

PROPERLY

MANAGED

IN THE

ART OF

REASONING

AND

IN THE

ART OF

REASONING

AND

IN THE

ART OF

REASONING

AND

IN THE

ART OF

REASONING

160
C669a
1657

Rare Bk Room.



TO THE
ILLUSTRIOUS,

His Excellency

Oliver Cromvvel,

GENERALISSIMO

OF

*England, Scotland, and Ireland, Chancel-
lour of Oxford, &c.*

AND TO

The most Renowned his
Generall Councell of Officers.

SIRS,

THe Commodement of the Publike in
the Appendages of an holy Peace, as it is
the *'Axiom*, and just Carac of Heroick En-
terprizings; so *herentes capiti multa*
cum laude Corona, the Crown and Apex of their
Glories, whom God shall honour to contribute
thereunto, though but a Grain or Atome.

Whereof (my Lords) by the conduct of Pro-

A 3

vidence

988379

Jones 8 F 38

Book 2 Dec 39 1657

The Epistle Dedicatory.

vidence, and Advantage of your incomparable Magnanimities, after long Exagitations and Repugnance of Affairs, we have gotten more then a (glad) glimpse, and by your unwearied Zeals may shortly obtain the full Prospect and Fruition. | Doubtlesse Sir, there is a Standard of Reforming all things. Nor is any Modello gratefull to good men, as whose footsteps appear in the Word of God; wherein there is no *Peccadillo*; To which you do well to take heed, as unto a most exact and perfect Rule.

And because, to Tranquillity of Government, Corruption of Manners, and Mazing Errors are grandly opposite (these delude and distract, that doth debblish a people,) It will be your Prudence, Sirs, who sit at *Helm*, steering affairs of the first Magnitude, to debel and overrun the one, as it may be any ones part (who to common Weal oweth both himself and his *Devoire*) to abandon in his capacity the other, as Fatal thereunto; Which humble Attempt, my Lords, here Imploereth both your Resentment and Patronage.

The smattering (*Sciolus*) Soul of Lapsed man, in its most vigorous contendings unto Beatitude by its own Acies, cannot now (as in its estate of Native Innocence) with the *Eagle* behold the resplendence of Sunny Truths; Soaring in the highest Region of Contemplations, Penetrating the *Arcana*, and Essences of things; But through the flagginesse of her Pinion, flutters *Estrich* like, in grosse and earthy *Ideas*; Forming sensual and faint conceptions, and in its survey, often taking shewes and shaddows for substances, gets the minde great of Distemperature, and the State of Insecurity.

But

The Epistle Dedicatory.

But this *Iargan*, my Lords, or rather System of Logico-Theologie, as it will medicine the disease, so it will purge out the humour and serve (with Heavens concurrence) as the Clew of *Ariadne*, to guide the intricate and perplexed thoughts of the unfixed people through the great Labyrinth of Time, and involvednesse of affairs to a point of consistency; and as a *Jacobs* staff or *Astralabe*, to help them in taking the dimensions and full heights of things, by an infallible Rule of certitude.

And since knowledge is the excellency of man (seeing he abhors more to be accounted ignorant then vicious) surely the excellentest part of him (needs) must be that wherein this perfection in thrones, which being no other then intellect above Inferior Powers, challengeth the prerogative of Ayds and Organs: Of which kinde Logick (in our Native Tongue, as most rare, so) is the greatest and most proper, which frameth and reacheth the use of Instruments accommodable to every operation of the understanding in its distinct and deliberate Quests of Truth.

This quality in man is the true Philosophers stone, it turneth all that his minde toucheth into Gold and Treasure of satisfaction. It is *Janitrix Scientiarum*; the Tutelary and Guardian of all, both Morall and Intellectual Habit: On the raisen wings of whose perfections, the prone and Reptile Soul soars a pitch, Circuiting all the stately Provinces and Dominions of knowledge.

This is that which by (Grace) recovers us to our Primogenial condition, unclouds the masqued mide, plows up, and uncals the depths of Reason,

The Epistle Dedicatory.

Evolves the hidden *Ideas* of things, and unites the knottiness of every emergency.

By it are confuse things made Distinct; Abstract, Obvious: And the Planetick thoughts to act Syccentrick, and in its Sphete. This also rangeth the *Pel-mel* Conceptions to *Barilia* and Order; It unforks Oracles, making them Toothlesse, turneth into Milk bony Paradoxes, and Cloudy *Enigma's* to clear Sunshine.

Ignorance, Sirs, benights the Soul, or rather Eclipsieth it: By interposing it makes a man go all his way groping as he were blind: It is the Rack of ingenious and generous Spirits; who will oft rather drown then not dive beyond it; Nor did they ever finde a better way to chase or conquer it, then by Logickall Adjuments; The faithfull Organ to scent the footsteps of Truth (amidst the various Abolets of Error) in the Indagation and Researches after knowledge.

It is a Zealous (but frivolous) Mistake of (the *Aurochilus*) Some that would be thought Christians in these times; That Learning averfates, & Logick leadeth from the Grace and Truths of God: As if the Donations of Heaven were opposed, subordinated in mans tendency to Blisse and Glory; Can that be erroneous or bad: that teacheth what things be, or what be not, right and good? Such prove but the opinion of those men, who affirm the World groweth old, in their beginnings thus to dote and talk idly; Can there be contrariety in means that conspire one common end, mans perfection and happinesse? Gods gifts may serve, not shut out one another. Wherein Transcended us the first and second *Adam* and *Solomon* too, as

The Epistle Dedicatory.

to the Complement of their Natures, but in Logick and Philosophick endowments? The Con-
naturall Imposition of Names, at first to
things; That *Herbal* of *Herbals*, swallowed of
Time; And the famous disputes with the *Sambe-*
drin-doctors, and Saducean Families, abundantly
argue the advantages of acquired Habits; Nor
can the manner of their having them, diversifie the
Nature of them.

By this time then it transpires, That, as Nature
needs Grace, so Grace desireth Nature: and
Art both Grace & Nature. Nature without Grace
cannot do well; Grace without Nature cannot
do at all: But Grace in Conjunction with nature
and art, can do all things, as the great Apostle
and Master of Learning affirmeth of himself; and
as *Symilus* saith, Without Art Nature cannot be
perfect, and without Nature Art can claim no being,
οὔτε φύσις ἰκανὴ γίνεται τέχνης ἄτερ, οὔτε τέ-
χνη μὴ φύσιν κεκλημένην.

Now seeing this is the key of the Sciences, the
study whereof is not more pleasing then profi-
table, and *quisque cupit se beare*: Why should it
longer lie covert and concealed from the commu-
nity? Is not Communication the excellency
and measure of Good? *Bonum est sui diffusivum*;
Doth not the Glorious and Superessentiall Being
of beings (ὁ ὢν ὅτι πάντων Θεὸς εὐλογητὸς εἰς τὰς αἰῶνας
delight himself in scattering beams, and filling
every thing with the Expandings and Circumsuffi-
ons of his goodnesse? And why should the lesser
Beauties of Knowledge, and Arts be veiled with,
and confined to Forraign Languages (to the most,
Barbarous and unknown) since science is no mans
property?

I do

The Epistle Dedicatory;

I do not derogate Sirs from the Universities, which I know are the Seminaries and Founts of Learning and Liberall Acquisitions. Rich streams have, do, and may hereafter flow from thence, to Indent the Land with (Rivulets of) Refreshing Blessings: Yet beleeve I not, they should still (as formerly) have the Monopoly of Letters to inhaunce them as by *Patent*, above the price of the meanest capacity (if willing) to purchase them.

There cannot be a greater Prop (next that of quenching the heavenly Tapers of the Word) to the black Monarchy of the Prince of Darknesse, than the Engrossments and Enclosure of the Sciences. (which this layes open.) What were the *Hieroglyphicks*, and Imagery Resemblances of *Egypt*, and Ancient *Greece*, but to captivate the People under blindnesse of mind, whilst some few obtained Titles of *Magi*, *Demonies*, and *Sorphi*; The Guerdon of their most injurious services.

But this Book, my Lords, as it designeth the Disempaling of the Sciences, unlocking to the People the Mysteries of them: So Heaven (no doubt) may follow it with a Correspondence of blessing, and breaking up the Caverns and Cells of raigning ignorance, may enamour the People with the Attractive Beauty of them, and clearly inform them (omitting matters of faith) what is payable to the Magistrate, and practicable each to other. The want whereof agitates their lighter minds, scorched with flashing Zeal (unduly tempered and set on fire) to pinch the Magistrate of their duty, whilst they know it not perfectly, and Ravelling the bond of love in the unity of the Spirit;

The Epistle Dedicatory.

Spirit; for minute differences, uncharitably invade one another, contending as for their *Temples* and *Altars*.

And seeing Religion is the Pallisado, or rather the *Palladium* of Republiques, and knowledge the Cement of Religion; For that blesteth a people, this blasteth errour and drowns their breaches of Harmony; It importeth you *Sirs* whom God hath honoured with the chief Conduct of affairs, to promote both (which struck together, make a Diapason) since not-rare experience hath proved, where they have rung out for one, they have begun to toll for the other.

Indeed my Lords, you drive couragiously, you have almost doubled the Cape of *Bon Speranze*; Reformation and a happy peace will not longer ride at dead Anchor. These Mountains now removed, who were so long in travell of a *Monse* of Reformation; We have hopes to receive (by your hands, as by some good Angels) the first born of our blood, establishment of Religion and liberty, which lately was like to have miscarried in the Birth.

Sirs, God hath set you up the Oracles of War, made you to your Enemies Rocks, dashing them as Waves of the Sea; Your Drums, like *Zisca's*, conquering with Alarms, the clashing of your Armour terrible as thunder, your Victories alway as sure as the *Rancontre*; Every Field to bear you new Palms, immense structures to be crowded with Ensigns and Trophies of your admirable Successes; But these my Lords, are but Meteors adding Blaze, little of true Brightnesse: They have an *Umbrage* of *Grandeur*, not a spark
or

The Epistle Dedicatory.

or Dram of Glory; The *Enamel* of these *Gayeties* and *Gauds*, Sully and soon grow Dusky. It is your Zeals to the Interest of Heavens affairs, and the good of Community, that will be the *Heralds* to blazon your *Escutcheons* without stain, and *Aggrandize* your names to all Posterity.

And when the Ardour of Christian Charity in its sweetest Vigor, and the light of knowledge (by Providence. and your powerfull influences) shall flame, & as a flood break in upon us, and our youthful liberry open into a flower, then shal we grow rich with the increases of God, and the World venerate each of you, *Θεὸς ἐν οὐρανῷ ἀγαλλομένης*; As a little Deity guetting in a body of flesh.

Or what is it to have the airy titles of a great *Alexander*, a victorious *Cesar*, a politic *Hannibal*, a valiant *Scipio*? What Fate attended these *Philomathies*? Some of them liv'd the Idols of the age, and mounting upon the pinacles of State (elevated on the wings of their ambitions) were most ingloriously dasht & precipic'd; whilst others like descending spokes of Fortunes wheel, beheld the solemnities of their Honors funerals: Nor could the Monuments of these Whirligigs serve Muniments to their expiring glories.

Greatnesse without goodnesse is a slippery height: The possessor in endeavouring to stand, accerleth his fall: But who builds on the Rock of ages, shall grow still and *Bourgeois*, his leaves shall refresh and shade the afflicted of the People; his dayes shall be many and good, his walks shall be on an *Helix*, still dilating.

And

The Epistle Dedicatory.

And since God hath made you thus Great, may he also make you gratefull ; he hath given you the Conquest of affairs, to give him the Conquest of your selves and wills. Be the shadow and Echo, or rather *Heliotropes* shutting and opening to his good pleasure : Then having perfected Deliverance for this Nation (whose expectations you are) your greatnesse shall be complemented with goodnesse, and your aspiements with Glory.

But that I build not too spacious Gates to my *Mynda*, or throw the Fabrick out at the Casements, I only add, that your Lordships fixing this Land to a happy Temperament of Justice, and Equity, advancing Letters, and reforming all things to the standard of the Word, will render *England* the Worlds *Eutopia*, the most Felicitous of Nations, and having absolved your courses thorow the *Zodiac* of praise-worthy actions, you will set laden with Lustre, and satisfying soul-peace : Treasures of an higher *Carac* than the worlds *Magnalia* ; And the prayers of the Saints ascending with you, will Petarr your enterances thorow Heavens *Portcullis* ; while you scale the Battlements of Glory to perfect your Triumphs, and with Seraphic Hierarchies chaunt Eternal Trisagions in ravishing Division ; and every Col- lon and Column of your lives, quartered with the memory of your Archievements, cause your Names (Rivalling with time) to survive on Earth, perfumed as Incense, and Odorous as a pile of Spices.

—— *Magnum hoc ego duco,*

Quod placeat tibi, qui turpi secernis honestum.

Your Excellencie, Your Honours, and the
Common-wealths most faithfull servant.

Zach. Coke.

TO THE
P E O P L E
O F
E N G L A N D.

God hath made you an Ingenious and
curious People, may he also make you
wise unto Salvation. Not one of you
(I presume) but would know much,
and dispute well: This Book will serve you in
both your ends. It will lead you through the
plainnesse and depths of knowledges, both natu-
rall and Divine, which as yet perhaps seem
Mysterious to you, and impenetrable; make it but
your own, and you have conquered the difficul-
ties of all the Sciences; Truths that before de-
luge'd you, will take you now but up to the An-
gles.

Though it be a little one, it may live to do you
much good: and like the Bee of Myrmecides,
hath not the lesse Labour and Artifice. It is not
the

To the Reader.

the Enchanted Egg of Oromazes, instead of universall happinesse, stuffed onely with winde and Vapor, or as the numerous Tomes of the Times, Cui quidlibet scribendi est Cacoethes; which serve but to beat down the price of waste-paper, and to make the world sit straight about you; but securing always the Interests of truth, It will teach you to dispute and form a right Judgement of any thing, to discern golden Verities from glaring and gilded; and to assure your faith against the strongest Sconces of error, to Raze or batter it.

It will not lead you out of the right way (as some blind guides) but help you to reduce those that are strayed: From it, as from a spirituall Artillery, you may deprome all weapons of reason, to guard, not affront the truths of God (which not seldom suffer in mens hands.) But as the end of war is a calm and good peace, so Harmony and agreement of spirit, is the Mark, or rather Center of disputings: for Fencing is but fooling in the Faith.

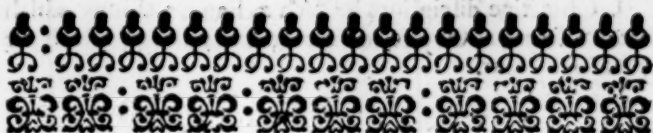
*Look then into it, go over it, and you will quickly see the use and Advantage of it: Judge it not by the Frontispiece, no more then you would the Riches of the Indian Mines, by the barren and Raggy surface of the Earth, or the Treasure of a Lapidaries store by the presentment at his window: Yet when you have read it, and (per-
chance)*

To the Reader.

chance) dispute whether it doth more please or profit you, know that as a passion to the common good both, conceived and brought it forth, so I have obtained, if growing up with the peace of the Nation, it shall leget any thing of Amity and Unity among the Saints: That Paul being nothing, and Cephas nothing, The God of Truth and Love may be All in all.

Z. C.

THE



The Art of Logick.

THe prime perfection and pleasure in this life *Generall*
(second to that supernaturall one, Faith in *rules to be*
Christ blessed for ever, and Sanctification *foreknown*
through the Spirit) consists in mans conver=*of Logick.*
sing according to understanding and Reason :
i.e. to understand, know and judge distinctly of things as
they are in their Natures.

To the attainment of such a knowledge, three things are
necessary.

1 The object or thing to be known, *viz.* Every thing in
Nature.

2 A naturall faculty or power of understanding, which
floweth from a reasonable Soul, and is innate to every man.

3 A certain disposition whereby this power is ordinate-
ly and regularly, that is in order, and without error, led
into A&T. Now this is either,

1 Immediate, and by infusion of God, which is extra-
ordinary and rare, and in these Ages of the Church promi-
sed to no person in particular.

2 Or it is acquired, and gotten by information and dis-
cipline, which is frequent and ordinary.

Now the disciplines disposing a mans understanding to
the knowledge of things, are either.

1 Objective.

2 Directive.

B

1 Objective

Objective disciplines. 1 Objective disciplines be such as handle things which are in Nature as Objects of our understanding, which are principally four.

- 1 Theologie.
- 2 Jurisprudence.
- 3 Medicine.
- 4 Philosophy.

1 Divinity, called by the Greeks Theologie, which is the knowledge of God, and things Supernaturall, as they are Supernaturall, &c.

2 Jurisprudence, or Law, which takes in beside the special Laws of God and Nature, the Canon, Civil Laws, the Law of Nations, our Laws Common, Statute and Municipall, &c.

3 Medicine or Physick, both the Speculative and Practique.

4 Philosophy, which comprehends Metaphysicks, which considereth things as they are such, &c Also Physiques, or naturall Science; next of all Mathematicks, which contains Arithmetick, Geometry, Astronomy, Musick, Opticks, and last of all Ethicks, or Morals, containing Oeconomicks and Politicks, under which again (beside History) is comprized Strategicks, called Martiall Discipline.

Directive discipline.

Directive Disciplines be such as handle not the things themselves to be known, nor do they inform or perfect the understanding of man in those things, but they prepare only some operation of man, and with framed Rules and Instruments do guide and direct it.

Now the operations of man requiring and needing such artificial Rules, are chiefly

two. The first is the understanding or cogitation of things. The second the signification either by word or writing of those cogitations (as for the Disciplines Directive of the signification of mens thoughts, as Grammer, Rethorick, Poetry, they are beside our purpose to treat here) and that which thus directs the understanding or cogitations,

Observe. All faculties have two things in them, Matter, and Form, or somewhat not unlike; the Matter, Precepts; the Form, the order of the Precepts. The Matter every faculty hath of it self, as of its own nature. The Form is by Logick administered.

cogitations,

gitations, is Logick only: to the consideration whereof, I mean the Homonymy and Æquivocation of the Word or Term, we now come.

The Æquivocation of the word Logick.

This word *Logick*

Hath divers significations: For first is meant by it the power or faculty of the understanding and reasoning, which is innate, and floweth from mans Essence or Nature.

1 Natrall Logick.

2 It may be taken for a frame or constitution of Logical precepts, by this or that man written, called a Systeme; which frame may be also taken for an Art, by a Metonymy of the Cause for the Effect, accepting Art not for an habit ingenerated in the mind by precepts and use, but for a collection of universal precepts, to operate in a determinate latitude and limit of End.

3 It may be accepted for a certain part of this whole frame or constitution, namely that which is of a Syllogism Contingent or Commune.

4 It may signifie an Act or Habit, begotten by precepts and use in the mind of the Artist; as when we say *Peter* is a good Logician: and this is the most proper signification of the word Logick, according to which we define it: So therefore

Logick is an Art of ordering and directing of mans understanding in the knowledge of things: Or secondly,

The first Definition of Logick. The second.

† *The thoughts of mans mind is nothing else but his reason or understanding wholly occupied about things.*

Logick is an Art that teacheth how to think and judge distinctly of all things.

In this Definition are contained,

- 1 The Genus.
- 2 The Object.
- 3 The End.

The Genus of Logick is an Art; for It cannot be Wisdom which teacheth and treateth of the highest causes and things.

1 Genus The five principall Habits of Aristotle.

2 Its not Understanding which containeth and consisteth of the habit of principles.

B 2

3 Not

*Reasons
drawn
from the
properties.*

3 Nor is it Science, which is made up only of such things as are real and universal.

*Reasons
why Logick
is an Art.*

4 Nor can it be Prudence, which teacheth things that are particular to be done and practised. It remains therefore that it be an Art: For,

First it imitates and perfecteth Nature,

2 It presupposeth a certain end whereunto it directeth all the means.

3 It is to be known, not for its own, but for the sake of some other; the profit thereof being in use, not speculation.

4 It adviseth nothing of the means, it consults not whether to use these or those means to obtain the end, for that they all are predetermined, and in a certain disposition or dinated to their end.

5 It operates without any contrariety, or repugnancy of the appetite and affections, as not engaging or disengaging them.

6 It is not commendable for the intent or purpose, but for the thing done, the work it self.

7 It is not to be dispraised when it errs of set purpose and industry (for it could have done otherwise) but when it errs of ignorance and unwillingly.

8 It is delivered by an Analytical and Resolutive method, proceeding from the object and end foreknown, unto the means which are to be ordinated.

Ergo, Logick is an Art.

*2 Object of
Logick.*

Of the Object of Logick.

The object of Logick is two-fold.

1 That which it directeth.

2 That whereto the understanding is directed.

Also the primary object of Logick is Reason, the secondary, Speech, the manifestation and utterance of Reason.

1 The object which Logick directeth, is the Understanding, Reason, Mind or thought of man: wherein two things are to be foreknown.

1 The properties of the understanding.

2 The parts and degrees thereof.

The

1 The properties of the understanding to the preknowledge 9 Properties of Logical precepts necessary, are 1 That those perceived of parties of sense, be first and best known the understanding.

By sin there are three defects in mans Reason.

1 Aberration from the apprehending of things.

2 Obscurity and difficulty, either not being able to comprehend the natures of things, or to discern them with their notes and properties, as in a glasse.

3 Distraction and confusion in the apprehension of them.

Logick now hath a medicine to cure these, which it doth,

1 By the explanation of things.

2 By the Probation.

3 By Ordination.

the understanding deduce thence its original knowledge. 2 That since the defect of our first parents in Paradise, our understanding cannot faithfully and certainly determine to comprehend the natures of things with distinctness and order, and by its own acies and strength to discern the truth, unlesse by artificiall and outward rules, directed and governed, unto which the understanding looks, as the Mariner to the Compass; In which respect and sense, it is in worse case than the sense,

which have conserved themselves sound & entire since the first apostacie, of their own force and vigour being still able to determine themselves faithfully to know their own objects. 3 That the understanding of it self, is rather carried to the cogitation of things universal (and such objects as are not determined either by will, place, time, &c. circumstances) then unto determinate things and singular, the effects and products of sense. 4 That the understanding acts not in a moment, but successively, in time, and by order. 5 It understands not the same independently, and of it self, but goeth from one thing to another; and hence it is that the distinct knowledge of God is paramount the reach of the understanding, there being nothing in God diverse from God, or what is not God himself: in man there are many things more obvious to knowledge than man himself, but in God there's no such thing, who is conceivable only (& that but most imperfectly) by himself. 6 That at one and the same time it is occupied about, and understandeth but one thing. 7 That the object must be proportionate to it self, and finite; it cannot understand God who is infinite. 8 That

The Art of Logick.

it may assent certainly to conclusions proved, even Testimony (if authentique) yet so as no distinct knowledge can be gotten in the understanding, except there be a mean from the nature of the Predicate or Subject; for that to know, is by the Cause. 9 That the instruments of its operation need be pure and composed, should be spirits void of affectuous humours, as Anger, Fear, Malice, Revenge, &c.

Degrees are three,

2 The Degrees of the understanding.

1 The first degree of the understanding is simple, viz. the apprehension of a single Term or Theme, as *Peter, Paul*, a living Creature.

2 Is the conception of two Terms by way of composition, as when we think, *A man is a living Creature*: or, *A man is a reasonable Creature*.

3 Is when in order we think of more than two Terms passing the thought from one to the other, till you come to a third. This is discourse.

Διαβολα.

Discourse now is two-fold.

Illative.

Ordinative.

Illative is such a moving of our Thoughts, as when by the repeating the co-ordination of things, that is, the third Term with the two former, we judge the co-ordination of these two Terms to be true or false: This discourse is that which is called Syllogistical.

2 Ordinative is a moving of our thoughts from one part of the doctrine to another, that so we may judge how they consist and hang together. This discourse is called Methodical.

The Object to which the understanding is directed and ordered, is every thing in Nature; for the understanding and comprehending of which in our thoughts, the Understanding needeth and seeketh rules of Logick.

Things to be known,
& hreefold,

1 Of this object there is a three-fold partition of things. 1 Some are infinite, as God, and hereunto the service of Logical Instruments is not sufficient for the eliciting of a perfect conception or knowledge: Others are finite, and create; and of them some be spiritual and imperceptible by sense, and with much ado can the understanding conceive them;

them : Some also be corporall, and to know them and their instruments, Logical instruments chiefly serve.

2 Things in nature are considerable two wayes. 1 Indeterminately without respect or restraint to Term, Place, or other circumstances, as a Man. 2 Determinately unto circumstances, as Peter Paul, &c. About the first (as about things universal) are Logical instruments and directions primarily and principally used About the latter (as about singular) they are used but secondarily.

3 Things are considered absolutely and in themselves, and so are called simple beings, or *entia*, or things, as a Man. Sometime as co-ordinate, and one with another, as a Man, a living creature: now they are called compounded. About the first, the first part of Logick is used; about the latter, the second and third parts.

The proper end of Logick, is, the ordering and directing 3 *End of*
of mans cogitations (or the acts of mans understanding) in Logick.

*Mark, other Disciplines do not
so much direct the mind (Physicks,
Mathematicks) as teach
and minister the knowledge of
things; whereas Logick of it
self is but τῶν ὁρίστων.*

the knowledge of things; this
is the true and proper end of
Logick. 1 Because every essential end must be equall to its thing ended, (nor streighter nor larger) because the end constituteth the essence.

2 Every end must be one, for the unity of an Art depends of the unity of the end; as the unity of knowledge depends of the unity of the subject. 3 An End in Arts not conjecturall, such is Logick, must be put when the means are put; and these three *Criteria*, or rules, exactly do agree in the direction of the understanding: and hitherto having minded the nature and essence of Logick, lets now consider the properties and effects that followeth the essence.

Properties of Logick.

1 No discipline more helpeth the wit, or contemplative *Proper ac-*
sharpness, i. e. the inclination of the temperature to con= *idents, and*
template distinctly and accurately. 2 Unto the wit belongs, *the effects*
1, The judgement, or judging faculty, i. e. a disposition of Logick.
soundly to think and perceive whats true, and whats false in 2 *ἐμπειρία*
things. 2 A facility of learning. 3 Discipline. 4 A witty 3 *παιδεία*
faculty quickly to find out the mean to prove the truth, and 4 *ἀντιλογία*

refute the falshood, all which Logick helpeth, ordereth, directeth.

3 Logick is the directory of the thoughts, making them regular, that whatsoever is conceivable of a thing, may be drawn to a right sum, for an orderly proceſſe in them, and to avoid confuſion.

4 When a man hath ſoundly and well thought on a thing, it enableth him exactly and in order to teach and write it.

5 It cauſeth a man well to learn that which is well taught.

6 It giveth a reflexive knowledge to a man, that is, it makes a man not onely know (directly) but makes him know that he knoweth a thing.

7 It enableth a man to reſolve what is compoſitively handled by others.

8 It much avails and profits to conference and collations, whether occaſionall or other.

9 By it, is a man enabled to an apt and regular placing and acquiring of intellectuall vertues, as on which depends the diſpoſition and order of all diſciplines, as to their frames and conſtitution.

10 It is the rule of thoſe habits a man hath acquired, inſtructing him to work aright; yet I mean but the rules of ingenious and intellectuall operations.

11 In reſpect of man (that is to learn) it is the rule of all other diſciplines whatsoever, but eſpecially for Divinity. I ſay not, it is eſſentiall to the ſimple knowledge of things ſubſtantiall to ſalvation (for this may be by infuſion from heaven, without any humane artifice) but I mean, the ordinary way of erudition and ſkill to handle places in Theologie, depends on Logick.

Now unto Logick (as unto every habit) are required three things, (as it were efficient cauſes of it) Nature, Method, Exerciſe.

1 Nature
required
unto Lo-
gick, as the
(as it
were) effi-
cient cauſe.

1. *Φύσις* or Nature, that is, a naturall faculty, which conſiſts of the humours, diſpoſition and temperament of the body, whereby a man is inclinable to this, more then to that Diſcipline.

2 Method (*Μέθοδος* in the Greek) is a Collection and frame of all Logickall precepts, needful to the acquisition or getting the habit of the Art.

About

About this frame two things are considerable.

1 Invention. *m*

2 Conformation. *n*

The principal Inventor of this Art (as of all other) is the Spirit of God, viz. the holy Ghost; then, men his Instruments in all Ages. *m*

Now the Causes motive of men to invent this Art, were

1 The defect of mans nature, who out of a perception that the thoughts of men could not well determinate themselves to the understanding of things without the help of second thoughts, were forced to frame and devise such, and they call them Logickall notions. *a* *Ελλείψις ἀνθρώπων τῶν φησέων*

2 Θαυμάσιος: Admiration of natural effects, arising out of abstruseness of the Causes, causing grief to ingenuous spirits (for wonder speaks ignorance) by which they were irritated to a serious enquiry after the Causes, which without Logical determinations was not feasible.

3 A prurition and itch after knowledge (innate to every man) Now he that desireth an end, adviseth of, and desireth the means conducent thereunto, and such in speciall is Logick.

The means men used at first (I mean since the Fall) for Αἰσθησις, the expoliting and adorning of the Art of Logick, is, first, Ourward Sense, principally those of Seeing and Hearing.

2 Ἰσότης, Observation; and this ever presupposeth remembrance, which is nothing but a reflexion upon something formerly taken notice of. *For nothing comes into the understanding but that was some manner of way first in the sense.* 3 Εμπειρία, Experience, that is, the collection of many Observations and Examples, and retaining them in memory. 3 Επαγωγή, Induction (the third *but that* ἐνέργημα, that is, effect of the understanding, is invention) which from the judgement of the senses, and experience of observations, formeth in the understanding a common and universal notion, which as it were is a rule by which the knowledge and vertue of working are directed in the operation to come.

In the Conformation of this whole Logical Constitution, two things are very observable. *n*

1 The Formal. *q*

2 The Material.

1 The formal, &c. consists, 1 In the determinate distribution of the parts. *a* 2 In the co-ordination of the parts so determined, unto the end of the whole: *b* *q*

1 In

a

1 In the distribution of the parts, these *κελῖνες*, or rules are observeable. 1 Every good distribution should be made with words fit and significative unto the minde, of the parts of the whole distributable, but not of any thing not therein contained. 2 Division should be of the whole, not of the parts of the whole. 3 If it be a good division, the parts (divided) will be equal to the whole, and neither more nor less. 4 It should consist of such parts onely as are in the whole, retaining the same order, and agreeing with it. 5 In a good partition there should be a disjunction & segregation of the parts one from another, neither presupposing or including one the other. 6 And this disjunction of parts must be such a disjoynner which mensurates the whole, and whereby the whole is constituted. 7 A division should distinguish the whole, not confound or perplex it. 8 The parts (integral) should be amongst themselves of the same order and nature with the whole, that the whole might the better measure them. 9 Lastly, A good division should be commodious, and apt to notificare the whole.

2 Method
requisite to
Logick.

The second (as it were) efficient cause of Logick, is Method, the division whereof (or the generall way to learn it) is into three parts.

1 The first is of the generall precepts to be foreknown (which precepts are as the Porch of a building) as of the signification of the word or name, the acception of it, the genus, or generall title of it, the end, the object, and the parts.

Three parts
of Logick
precepts.

1 Directrix
νοήσις,
2 Directrix
κωνοήσις
3 Directrix
δραστήριος

2 Is the Method or frame of the precepts constitutive of the Art; these are the chief rooms of the house.

3 The Exemplar or pattern of this Art of Logick to be used and practised, which serves as the Postick and hinder part of this Edifice.

Again, the second of these is tripartite, or admits of a three-fold division. The first is, which shews the cogitation to co-ordinate two terms one toward another. The second and third, which direct the discursive cogitations; when they are first Illative, & go by way of inference and consequence; Or 2 When they are ordinative, methodicall, and by conclusion, as is premonstrate; And so much as to the determinate distribution of the parts.

b

2 Now come we to the Co-ordination of the parts, concerning which, note these *κελῖνες*, or Rules. 1 That every constitution or frame, is a mean to some determinate & certain

tain end, therefore it ought to be proportioned and ordered to this end, with a certain proportion, adornment and method, and adapted to the happy acquisition thereof. 2 Whatsoever is in the end or use, must be put into the constitution and frame, not more or lesse. 3 Let no precept go into the frame, that maketh not for the end or use. 4 The use should easly and plainly be understood by the precepts, it being a thing unfit that the instrument should be more hardly understood than the use of it. 5 That we may attain without precepts, there should be no precepts delivered of the same. And thus much of the Formall, of the frame of Logick, now come we to the Material.

2 The Material then of the frame of Logick, consists in *The Material of the frame of Logick.* that wherein the partition and conformation before hand-
led is, and it is two-fold.

1 Primary.

2 Representative and Secondary.

The primary Material also is two-fold.

Simple. *a*

Compound. *b*

1 The simple material, be the Logical terms, † words made to represent the sense of the cogitations, so that the understanding is as it were limited and confined within it self in cogitating and thinking; they are called Second Notions. *a* † τεχνα-λογήματα.

The first Notions are the conceptions we have of things, as they are things.

Now these second Notions do not directly and by themselves shadow out unto us the things themselves, nor any thing accidental or appendant unto them, but point unto certain intellectual Rules, whereby we do with all distinctness and regularity form things, that is, the conceits of things: As the Sailors Compasse doth not give direction to the Mariners by subjecting to the sight the very winds themselves really, but the North-wind, South-wind, &c. as they may be speciflicated, or the Regions wherein they range. Those that primarily imposed names, intended to name first the things themselves, & then secondly they added second Notions, which we call Mental and Logical: As the word *Man*; is to expresse primarily the conceit which we form of Humane Nature, and is as the image thereof, and immediately founded therein; for mans nature is the immediate ob-
ject

ject, and this is a word of the first intention; but when we say, a man is a Species, or a Genus, or Difference, &c. these are words of the second intention, not desumed immediately from the thing, which is humane nature, but from the manner of understanding, whereby we understand such Terms to agree unto *Peter, John*, and every man.

b

2 The compound Materiall be the precepts in Logick, framed of and from those Notions of second Intention, explicitly & plainly exhibiting to our minds and understandings, those things which the second Notions themselves do but implicirely and darkly; these therefore are necessary unto the learning of this Art of Logick, and ought to be formed according to these subsequent Rules.

*next herea
For the
constitu-
ting of Lo-
gical pre-
cepts.*

1 The precepts of Logick should be made regularly and fully to obtain the End. 2 Both as to the words of them and number, they should be conceived and set down determinately. 3 They should be Homogeneal, that is, of the same kinde, mensurated and adapted only to this Art and End. 4 They should be framed plain and with perspicuity. 5 They should be apposite and fit to the teaching and learning of this Art.

*The second-
ary Mate-
rial of Do-
gick.*

*next herea
Of the se-
condary
Material.*

And so much for the primary Material of Logick.

The Secondary Material, or representative, are Examples added to the Precepts, which is only a particular experiment of this or that precept, either upon our selves or others; wherein are observable these following Rules.

1 Examples ought to be agreeable and fitting to the nature and end of the Art, deducing carefully the experiments from those had arrived unto the end of the Art, and that accordingly operated. 2 Examples, as accommodate to the precepts, so they should be very intelligible, fit to be made use of, and proportionate to the truth and verity of the precepts. And thus much of the first and second efficient causes, by which the habit of Logick is acquirable (*viz.*) the Nature, and Method. We come briefly to the third Efficient, which is, Exercise of Logick.

*3 Efficient
cause of
Logick.*

The Exercise then of Logick consisteth in this, that we frequently think on, & diligently meditate things conformable to the prescriptions and rules of Logick, that is, orderly and distinctly: This indeed is the chief, most principal, and the nearest Efficient Cause of this habit in us of this Art of Logick, and immediately engenerates and expresseth Logick

in us, whereas Wit and Precepts are Causes but remote.

The means and parts of this Exercitation are two.

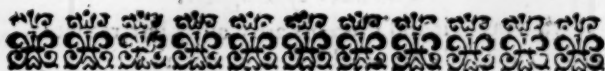
Representative.

Operative.

1 Representative are such as are superadded to the *The means*
Rules of Logick, as Experiments and manifest Testimonies, *and parts*
Forms of Disputation, Resolution, &c. *of Exercise*

2 Operative is the very Art it self of this Exercitation *two.*
and Use, which should be by an assiduous imitation of the
most eminent wits, and by the agitation of our own. And thus
much of the Prolegomena's, and things necessary to the
foreknowledge of Logick.

THE



THE FIRST
BOOK
 OF THE
 Art of Logick.

which dire-
 cteth simple
 terms.

3 Parts of
 Logick.

νόσις καὶ
 ἀδιαφέ-
 ρων.

ἐκ τούτων
 μα.

Simple
 terms two-
 fold.

A single or simple
 term is,

Logick is an Art which conducteth the mind
 in the knowledge of things.

It hath three things to be remarked as
 parts thereof. The first is, that which di-
 recteth the first operation of the mind, which
 objecteth to it self onely single or simple
 things, by the mediation of a single or
 simple term, which is a notion or instrument of Logick, re-
 presenting unto the understanding one thing (called there-
 fore incomplex:) and it is called a second notion as it is the
 minds image and pourtraict, shadowing to it self some out-
 ward thing. First notions are (as it were) the string or rule
 of a Dial; second notions are (as it were) the ombre and sha-
 dow made by that rule or string: these both shew the hour,
 but the string or stem first and fundamentally; the second
 (that is the shadow) but secondarily, as it configurateth to
 the other.

1 On whom the latter depends, and it
 is either { of a word,
 { or of a thing.
 2 Arising from the first, and it is also
 either { of a word,
 { or of a thing.

Of a Word or Voice.

The term of a Word is that whereby the naming of a thing is considered; a word is the sign of things or conceptions, pronounced or written with a certain frame of letters and syllables.

In a word three things are remarkable.

- 1 The Material.
- 2 The formal.
- 3 The Imposition.

The Materiall is the sound in the pronouncing of the letters and syllables, whercof the word is constituted, either in speaking or writing.

The Formal is the signification of the word, and by consequence the relation to the conceit of the minde which giveth knowledge of: now the efficient cause of this signification, is, the imposition and institution, which in the Hebrew Tongue is Divine (as God was the institutor and imposer) in other tongues humane, as having been invented and imposed by man.

Unto a Word appertain

- 1 Divisions.
- 2 Affections.

1 Of the division of words.

1 Words have their divisions either

Of the thing signified. *a* *

Of the manner and ordering of signifying. *b* *

Of things signified, some words are	{	Of themselves significative, as a Man or Woman, Worm, &c. and all Nouns that signifie a thing wholly.	{
		Consignificative, and that need other words to expresse their meaning, as Adverbs, Pronouns, &c.	

Significative words also are of the first intencion which signifie of themselves without the help of the minde, and they are the things themselves, or

2 Of the second intention, which means not a thing (it self) but the manner of it, or word of Art, whereby the thing is understood.

b

"ἀφαιρ-
ματική.

Now the division of the manner of signifying words is

into { Abstract } "Abstract, is which signifieth a thing apart,
 { Concrete } causing the minde to meditate the simple
 and precise nature of any thing, as God-
 head, Manhood, whiteness, redness, &c.

Concrete is that which signifies things conjoyntly, as having more natures then one complicate or conjunct, as man, white, holy, &c.

Words also are { of { 1 A particular signification, as
 either { 2 Collective signification, as a
 flock, a company, a Church, &c.

Again, of the manner of signifying, words are either { Distinct.
 { Ambiguous.

Distinct, which hath a certain and distinct signification, as fire, earth, ayr, and other names of things existent in nature.

An ambiguous word, is which indistinctly signifieth things that in nature are divers, as *Cancer*, which signifieth both a living creature and a disease; hereunto all words that are Equivocall, and have divers senses are referrible.

Now words become doubtful either { by chance.
 { of purpose.

ὁμώνυμα
ἀπὸ τοῦ-
χρῆς.
ἐν πρῶ-
ταύτης.

Words ambiguous by chance, is, when reason cannot be given why one name should be given to things divers in nature and definition.

Of purpose doubtfull, is when a common name is given to divers things upon counsell, and for some certain reasons,

and this again is doubtfull either of { Dependance. a
 { Similitude. b

Ambiguous of dependance, is when a generall name is given to divers things, whereof one is dependant on another (as upon the more principall) touching the nature of it; as this word *thing* is most generall, and therefore doubtfull, it being attributed both to substances and accidents, but not equally and alike; for to a substance it is given of it self, and principally; to an accident, lesse principally, as having its nature

ture dependent of the substance, it is therefore called an Analogous "general or Genus.

"ὁμοῦμα

Ambiguous of similitude, is, when for some consimilitude or likeness, together, one name is given to divers things, and is either 1 Simple, *d* or 2 Compound *e*

περὶ τι.

b

d

1 Simple, is, when the Similitude lies between two and no more, and is of *c* Conceit.

2 Things really.

Ambiguous by similitude of conceit, is, when two things altogether divers (as God and the Creature) obtain one and the same attribute or name upon the conception we make of some similitude betwixt them; so God and man are both said to be good, just, to repent, &c. whereas really, no words can be found to expresse Gods most incomprehensible Being.

Ambiguous by similitude of things in reality, is, when the significations of their natures or operation bear an evident and known similitude. As when meat and medicine are called healthfull, because both cause health: Or, as when a beast and a disease are called a Wolt, because of the rapacity and ravenousness of both; and upon this account are the Seals of Gods Covenant called Sacraments, because of the correspondence and similitude they bear unto those Solemn Oaths, wherewith men were in former ages bound and consecrate to the Wars.

Ambiguous of a Compound Similitude, is, whose likeness consisteth of a proportion between four; and it is called *Analogie*. As this word Governour is Analogical and proportionable, when attributed to a Magistrate and a Shipmaster; for (here is the proportion between four) as the Master of a ship or Pilot is unto a ship (whereof he hath government) so is the Magistrate unto the Common-wealth. In like manner, flesh is Analogical in respect of beasts, birds, and of apples, cherries, &c. And in this sense are Magistrates called Gods upon earth, *Psal. 82. 6*. And thus much of the divisions of Words; Now follow their affections, or their Canons and Rules, which be three.

ἑνὸς

The first affection of a word, is, that it should be perspicuous, that is, plain, and significative unto the mind of that which it ought to signify. 2 It should be received by a common consent and use. 3 It should be proper, determined and adapt to the signifying of the thing to be signified.

Rules of the affections of words.

Of the Order of things.

Having hitherto treated of the first single Term, which is of a word; the next thing to be treated of, is the single Term of a Word which without the word representeth to the understanding somewhat of the thing it self.

And it is either { The order of things called Predicament, or some Term or Notion without the Order. *

* ουσια-
χία.

The Predicamental Order is a distinction and disposition of all things by certain orders, and degrees of orders.

Herein are considerable,

What a
Predica-
ment is. a

1 The man-
ner of re-
ceiving
things.

- 1 The manner how things are received in o this order a
- 2 The graduation or degrees of this order. b
- 3 The particular things themselves. c

1 The manner of receiving them into this order, is first Direct. 2 Proportional. 3 Collateral. 4 Indirect. 5 By accident: all which are declared by eight Rules following.

First then directly and primarily in the order or Predicamental scale, is a thing which is, 1 Real and positive: 2 Simple and of it self. 3 Universal. 4 Compleat or Whole. 5 Univocal (that is) a thing signified by one distinct and certain word; these five are as it were conditions of referribility in things unto a Predicamental order.

2 Receiving things into this order, is by proportion; thus may God (blessed for ever) be brought in, not directly, because he is a most simple Being, one in Number, having neither Genus above him, nor difference to restrain him, because whereof, he cannot be placed in the Predicament of Substance, but Analogically, and by proportion.

3 Collaterally, side-wise, or obliquely; thus a difference is placed in the Predicamental scale or series (as a reasonable soul, if it be taken for the difference of a living creature, is placed in the Predicament of Substance, but side-wise, not directly: hitherto also may be referred Abstracts, to wit, Abstraction of Inferiours (as they are called) as Humanity, Animality, &c.

4 By Reduction, or indirectly: things placed in this Predicamental scale, are first Concrete, and which simply con-

first not of one and the same thing, as just, mercifull, and other Concretes, containing both substances and accidents : so the Church, the World, and other like Collectives : hither also may the parts of any whole be referred, as the head, hand, foot, &c. but reductively, and by reducing them unto their whole.

5 By Accident do appertain to the Predicamental order things compounded ; and this they do by reason of their simple Terms, as Man is a living creature ; this sentence is referred to the order of substance ; A man is learned, this is referred to the order of substance in part, as it respects the man ; and partly to the predicament of quality, as this man is learned. 2 Things Intentional, without the minde, as the Images of true things, colours seen in a glasse, &c. 3 Second Notions, as words of Art, Genus, Species, Difference, &c. 4 Relations of Reason, as the right or left side of a pillar, &c. 5 Privations, which are alway referred unto the same Predicamental order that the habits thereof are ; as blindness is in the same rank that sight is. 6 Fained things, things of fiction, as a Golden Mountain, *Hirco-cervus*, &c. referred to the predicament of substance.

6 From the predicamentall order be excluded plainly 1 All words of ambiguity and doubt, at least before they be distinguished and limited. 2 Fained things, which are absolutely impossible, as a Created God, Deified flesh, an unbloody Sacrifice, merit of works in a sinner, universall Election, and other such prodigious fantasies.

7 A thing in it self simply one, pertains to one Predicament ; if it be Concrete, it may be referred to two, but inequally, and so that it be primarily under one, *viz.* that which it most respecteth ; so Baptisme and the Lords Supper are not to be referred to Substance or Action, but to Relation, because water and the washing therewith are but the materiall things in Baptism ; the formall being the holy Relation in signing and sealing the Spiritual washing away of sin.

8 Lastly, things themselves are placed in the Predicaments of themselves and fundamentally ; Concepts and Names of things but secondarily, and so far forth as they represent things : and so much of the manner how things are received into the Predicamentall scale or order : we passe now to the second, *viz.* The degrees of the order, or Predicamentall Series,

The degrees then of this Order, by which things are to be understood in their ranks, some are superiour, some inferiour to others, and these degrees are not unfitly called Predicables,

A Degree is $\left\{ \begin{array}{l} 1 \text{ Direct. } aa \\ 2 \text{ Collateral. } bb \end{array} \right.$

1 Direct, when we ascend or descend forthright, that is in a strait and direct line in order, as Genus, Species, Individuum.

2 Collateral, when the ascent or descent is made in an indirect line, and side-long, as *Difference*.

Again, the direct degree is either Primary or Secondary.

Primary, as Genus, and Species: Secondary, as Individuum.

Primary, is that which in the Predicamental order is universal or common to many, and is Genus and Species.

Genus.

Genus, is that which hath Species under it, that is, a general is that which containeth two specials or more under it.

Rules 4.

The common Rules hereof are four.

1

1 The Genus or general is alway of the same Predicament or order of things with it Species or special. By which Canon or Rule, you may discern any, and many false generals, as that the body of Christ is not the true Genus or general of the Sacrament of the Lords Supper; that water is not the true Genus of Baptism, nor an action the Genus of sin, nor air of sound, that harmony or number is not the Genus of the soul, for such be not in one Predicament; by this also Metaphors are removed, as when the Church is called *Noahs Ark*, or the Spouse the body of Christ; these are true, but not the true genera or generals: for Metaphors shew not what a thing is, but what a thing is like to.

2

2 The Genus is never the cause of his Species, nor the subject, nor the accident, and therefore is never predicated or spoken of his Species in the Concrete, but alwayes absolutely in the right (that is the nominative) Case: They therefore erre, that in the Mençons make water to be the Genus.

Genus of rain; fire the Genus of a Comet; air of the wind; whereas Meteors are called waterish, fiery, airy; so the cause cannot be the true Genus, as when dubitation is said to be the counterpoise of equal reason; Anger the boiling of the blood about the heart; Death the separating of the soul from body, &c. In such, the causes are placed in stead of generals; so also for the subject, when we define wind to be the air moved; Original sin to be corrupt nature, &c.

3 The Genus is alwayes and necessarily more large than all the Species of it, and is not returned or reciprocated with them.

4 The Genus is inseparable from his Species; not can that be the true Genus without which the Species are or may be in any, or any where: this proves motion cannot be the true Genus of pleasure, seeing pleasure may be somewhere, where motion is not or ceaseth.

Genus is twofold }
 } Supream.
 } Subaltern.

Genus
 twofold.

1 The highest and most general, is so a Genus, as it can never be a Species.

2 Subaltern Genus is, that is successive and by turn, that is, when it is Genus of them contained under it, and Species of that which is above it.

Also the Genus is either remote and afar off from the Species, or, 2 Neer and next unto it; as the Genera of a man, a living Creature is the remote Genus, and Animal is the neerest Genus; for there are none other so neer man as those two.

Again the Genus is }
 } Perfect. a
 } Imperfect. b

Perfect Genus, or a Synonymous general is, when his Species all of them take equal part of him; as a living creature is the equal and perfect Genus of man and beast; for a beast is a living creature no lesse than, and equally with a man.

The Canons and Rules of a perfect Genus are five.

1 A perfect Genus hath a Nature not separated, but yet distinct from all his Species.

2 All that which is in the Genus is equally communicated with the Species, so as nothing can be said of the Genus, but

Rules of
 a perfect
 Genus.

but the same also may, and must be said of every Species.

3 The Genus is in Nature before all his Species, and therefore first in that knowledge which is according to Nature.

4 The Genus hath necessarily many Species, as not being able to be conserved in one; for every genus is perfected in determination of opposite differences, and opposition implyeth plurality; so that one genus must of necessity have at the least two Species.

5 A perfect Genus being put, there needs not therefore any determinate or certain Species to be put; and if one Species be denied, the genus is not thereupon denied.

There is an Analogy and similitude between a Genus and Matter: For first as the matter is more imperfect than the form, &c. So is the genus more imperfect than the difference or Species. 2 As the first matter is undetermined to any of his forms so is the genus to any of his differences; & as the matters have a power unto the opposite forms; so hath the generall unto the opposite differences; yet neverthelesse there is greāt discrimination betwixt the genus and the matter, and they be not the same.

An Imperfect Genus is that which is not communicated with his Species equally and alike, but to one more, to another less.

3 Rules of
an imper-
fect Ge-
nus.

The Rules and Canons of this be three.

1 An Imperfect Genus, is immediately, properly and of it self communicated but with one Species, with another it is communicated but mediately and secondarily in order to the primary Species; so this genus (thing or *ens*) is an imperfect genus to substance and accident; for *thing* is communicated primarily to substance; to accident but secondarily in and by the substance, accidents being not so much things Create as Concreate.

2 An Imperfect Genus hath not a Nature altogether distinct from its Species; so a *thing* naturally is not altogether distinct from substance or accident.

3 To put an Imperfect Genus, we must needs put some certain Species, viz. that Species by which it agreeth to the other; and this Species being denied, the genus it self is forthwith denied.

And so much for the first Predicable of the first degree, to wit the genus,

The Species.

Species, or the special, is an universal thing subjected, or subordinate unto the Genus : and it is,

Perfect, *a*

Imperfect, *b*

Perfect is that which is under a perfect Genus.

The Rules hereof be four.

1 The Species is in Nature after the Genus, & in Knowledge distinct.

2 It ariseth from the determination of the Genus, so as it swalloweth up, as it were, the whole Genus in it self; that whatsoever the Genus hath, it also hath.

3 Perfect Species do equally participate of their Genus, one as well as the other.

4 Perfect Specials be in Nature together. As a Man is not after a Beast in nature, though in time Beasts were first created. So Baptism and the Lords Supper be in Nature together (being alike Species of the Sacrament of the new Testament) though in time Baptism was first.

Imperfect Species, is that which is under an imperfect Genus.

The Rules hereof be three,

1 Under an imperfect Genus, one Species is more principal than another. So a Substance is the more principal Species of a Thing; An Accident is lesse principal.

2 The principal Species of an imperfect Genus, communicateth as much to the other Species, as doth the Genus it self. So an Accident is as much bound to a Substance, as to a Thing.

3 The principal Species is in Nature and Knowledge before the lesse principal, for it depends wholly on the principal, and is that which it is, by benefit thereof. This Rule discovereth the Popish Errour, That in the Masse the Accidents of Bread and Wine should remain without the Substance.

Also the Species
is either

Subaltern, that is, Species of
one, and Genus of another.
Most special, or lowest Species,
never Genus;

The Rules hereof be two.

1 The lowest Species cannot be divided by opposite differences.

2 It may be conserved in one Individuum.

The Individuum.

Hitherto of the direct degree Primary. Now followeth the Secondary, or Individuum.

An Individuum or singular thing, *ἄτομον*, is that which under the generals and specials is determined unto certain circumstances of Existence.

The Rules hereof be four.

1 The note of on Individuum is sometime more strict, sometime more large. The word whereby an Individuum is signified, is sometime single, sometime compound.

Single, as proper names, as *Christ, Abraham, Peter, &c.* or in stead of proper, as the Apostle, meaning *Paul*; the Philosopher, meaning *Aristotle*.

* *ἄνθρωπος*
† *ἰσχυρὸς*
§ *ἰσχυρὸς*

2 Compounds be either * Demonstrative, as this Man, that Woman, &c. Or uttered by commune names†, as a certain man, or the Saviour of the world, the Virgins Son, meaning *Christ*: the enemy of Mankind, i.e. *Satan*. These some call *Individua vaga*, and *Individua vaga ex hypothesi*.

2 Singulars, or Individua, as they are the secondary object of Logick, so also they cannot perfectly be defined; neither of themselves, as they be singulars, are they considered in disciplines: [for they belong to sense, as to be seen, felt, &c.] whereas universall things, appertain to reason; and as sense properly perceives not universal things, so neither doth reason singular things, viz. as they are sensible: nor so excellently as universals.

* *ἰσχυρὸς*

† *ἰσχυρὸς*

3 Singulars primarily and by themselves, do exist, work, and are perceived, [* Essence is of universals, † Existence is of singulars:] for hereto is required the Termination of some certain time and place, which is not in universals.

4 Singulars are incommunicable; for they having a most restrained Nature, have no inferiours to communicate with.

An Individuum § Accidental. a

is either, § Substantial. b

1 Accidental is, which is under the order of Accidents; [as Accidents have their Predicaments, so also their Genus, Species, singulars] So an habit is the Genus of Faith, Faith is the Species; but *Abrahams* faith, the *Centurions* faith, &c. are singulars, or Individua.

Subs

Substantial is that which is under the order of Substance.
And is

Absolute. *m*

With Addition. *n*

Absolute, which is looked on absolutely.

With Adjection, is a person, which is the first substance intelligent, incommunicable, not part of another, nor sustained by another.

Some singulars be called indirect, as are the names of Cities, Rivers, Mountains, &c.

Note these Properties, A Person must be 1 A Substance; so no Accident is a Person: It is 2 The first Substance, or a singular thing; so no universall is a Person. It must have 3 understanding; so no particular Beast, as Balaams Ass, is a Person. It is 4 Not part of another; so a mans soul is not a Person. It is not 5 Sustained by another, so Christs humane Nature is not a Person. It is 6 Not communicable; so the divine Essence is not a Person, for it is communicated with the Father, Son, and holy Ghost.

We have seen the direct degrees; now follow the Col- lateral, or sidelong, which is called Difference. *b b*

Difference is here taken in a strict and peculiar signifi- cation, only for the determination and restraining of the uni- versal and indifferent Nature, in the Predicamental order, and not for every distinction and diversity of things, where- of we treat hereafter. And thus Difference pertaineth to the degrees of Order, not as constituting or informing, but as binding and knitting; not as causing any thing properly, but as determining and tying together the universal in the Predicamental line. *The Difference.*

The Difference is that which restraineth and determineth the Genus in the Species.

The Rules hereof are eight.

1 The Difference respecteth the general and the special in a divers respect: the general as determinable; the special as determinated.

2 The Difference, as it is a difference, never noteth a thing compleat and separate, but always incompleat.

3 The Difference is after the general, and before the special, yet is it in the general indeterminately, or in * power. ** Swadw.*

Universals are like a long rope, loose without knot: difference is like a knot; the special is as a rope tied with a knot.

The

The knot is after the loose rope, but before the knit rope : and the knot which in power was in the loose rope, is in aft in the tied rope. A rope with knots differeth not really from a rope which hath not knots : so the Species restrained by difference, differeth not really from the Genus.

4 Every Difference inferreth his proper and certain Genus. Therefore differences should not be transferred from Genus to Genus.

5 The Difference that is to determine the general, must needs be opposite*; for difference restraineth not the Genus, but by a kind of opposition and sejunction of the Species.

* ἀντίπα-
χίαι.

6 Every Difference is inseparable from his Species.

7 The Difference is not varied by degrees.

8 The Difference is apt to be avouched (*predicari*) of his Genus, but in the Concrete, or in *quale*. For no difference sheweth what a thing is, but of what manner it is : As if one ask, What manner of living creature is a man ? The answer is, A reasonable, living creature : so that the difference is not so much spoken of the Species, Man, as of the Genus, Living Creature, or Animal; for it maketh the Genus to differ, and determineth it.

Difference is either,

Far off.

Nearest.

Far off, is that which is not reciprocate with his Species, called *Generica*.

Nearest, is that which is equal with his Species : It is called *Specifica*.

As *sensible* maketh a man differ from a stone, in a far difference; for other Species, as Beasts, have the same difference, but reasonable is the nearest, whereby he differeth from a stone, beasts, and all other things.

Hitherto hath been handled, 1 The manner how things are received into Predicamental Order. And 2 The degrees of the Order. Now follow, 3 The particular Orders, or Predicaments themselves.

There be ten Predicaments, 5 Some principal.

or Orders, and of them, 2 Some lesse principal.

The principal are, in which things first and properly so called, are disposed and ordered : and they be the first six.

And these be either,

Of Substance. *a*

Of Accidents. *b*

Predica-
ments.
Εὐστο-
χίαι.

1 The Predicament or orderly row of substance, is that *Substance*, where in the substance is orderly disposed by his Generals *gener.* and Specials.

A Substance is a thing subsisting by it self.

The Rules or properties whereof be three.

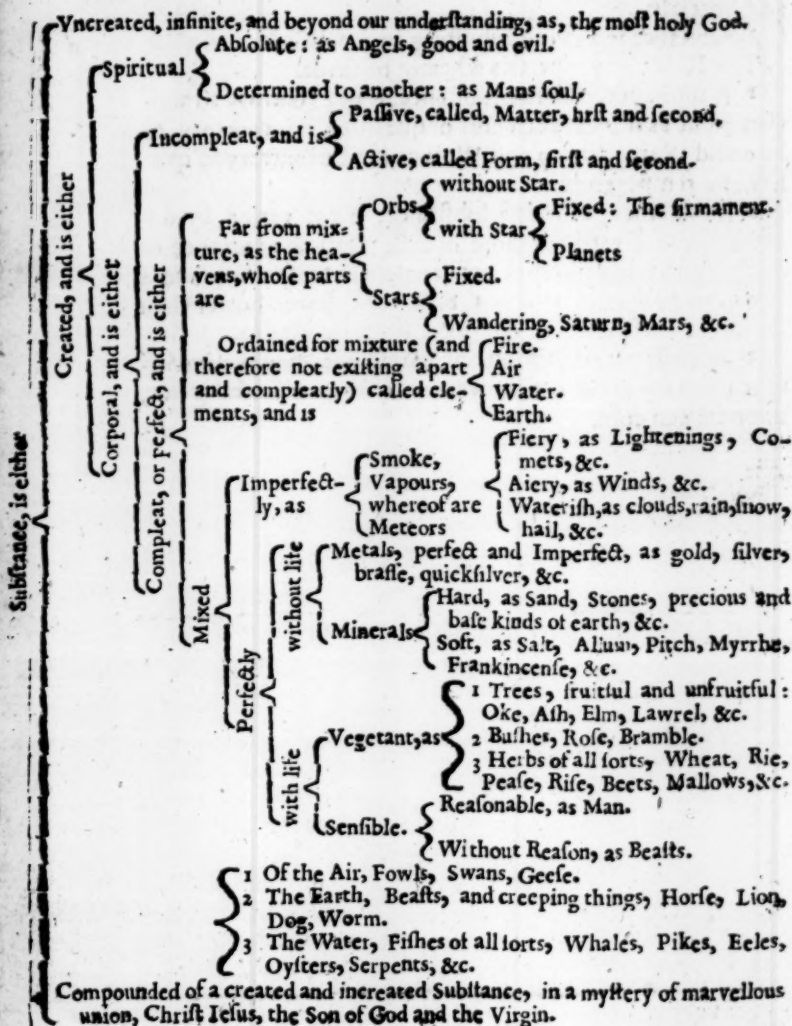
1 A substance, as it is a substance, is not contrary to another; but as it hath accidents or qualities, it is contrary, as Fire and Water, Sheep and Wolves, &c. be contrary in quality and temperature.

2 A substance, as it is a substance, is not varied by degrees, or receiveth not more or lesse; but the variance or comparison is in respect of accidents, as a Wise man, and a Fool, an Old man, and a Child, one water hotter than another: these differ in qualities, not in substance.

3 A substance remaining one in number, may receive into it contrary accidents. As water may be now seething hot, anon frozen cold,

The

The Order of Substances is to be seen in a Table, As



We have seen the Predicament of Substance.
Now followeth Accidents.

Accidents
b

An Accident is a thing which dependeth upon a substance, *Συμπεσόν* for the essence and existence thereof. The word Accident is *ἁδὲς* commonly used in a large sense, for all that beideth, chan- ceth, or cleaveth to any thing: but here it is more properly taken for that which cleaveth to a substance, and is no part thereof, and yet cannot be without the same.

An Accident } Absolute, having an absolute } Quantity.
is either } nature, as Relation. } Quality.
 } } Action.
 } } Passion.

The Predicament of quantity, is that wherein the Gene- ² *Quantity* rals and Specials of it are orderly disposed. Note that in every Predicament there is the Material, or thing it self (which Logick doth but lightly touch, as belonging to ano- ther place) and the Formal or disposing, and Table of the thing, which is chief in all Predicaments.

Quantity is that whereof the greatnesse or number of any thing is named.

And therefore quan- } continued, as greatnesse,
tity is either } dissevered, as number.

1 Greatnesse is extension, or stretch- } Properly.
ing out, and is called } Improperly.

Properly so called Extension is of the matter in a Natu- ral Body, which therefore is said to be continued, and di- visible.

The Rules or Notes hereof be five.

1 Greatnesse hath a certain continuance and position of parts.

2 Greatnesse hath of it self no motion, or efficacie:

3 Unto it nothing is contrary; for contrarieties are in qualities.

4 It receiveth not more or lesse: As one house is not more or lesse a house than another, though one be a greater house than another.

5 Of greatnesse, the subject is said to be equal or une- qual; greatnesse or extension properly so called, is length, breadth, deepnesse or thicknesse; the beginning of all which is a point or prick.

Length, is that which of the Mathematicks is called a line.

Breadth or latitude, is called the Superficies.

Thick-

Thicknesse or deepeesse is the threefold dimension, which is called also height, and of the Mathematicks, *Metaphoricè*, a body.

2 Number or multitude is the gathering together of Unities. And unity is the beginning of number.

2 Number is considered { Abstractly. *a*
Concretely. *b*

4 Abstractly considered, is that which is primarily in this Predicament. As 2, 4, 10, &c.

The Rules hereof be five.

1. 1 Number is not coupled with any common term, neither hath its parts indued with Position. As 3 and 7 are coupled with no common Term, though they concur to the making of 10.

2. 2. Of number, things are said to be even or odd.

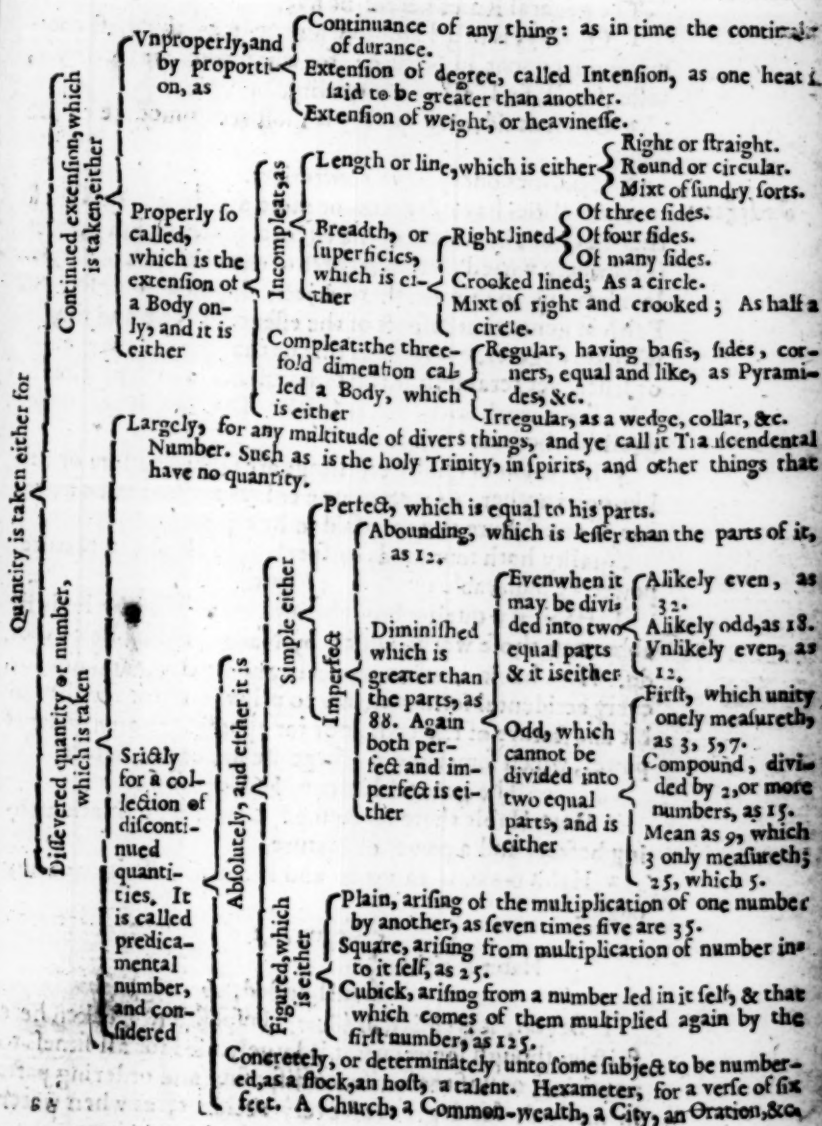
3. 3. Number also as it is number, hath no force, no efficacy.

4. 4. Number of it self hath nothing contrary thereto.

5. 5. Number receiveth not more and lesse.

Concretely considered Number here, is, things collective, which may be referred higher materially. As a Wood containeth many Trees, an Host many Souldiers, an heap many grains, &c.

The Formal thing of this Predicament is the Table or Order
of all Quantities : As,



Quality
 Traits.

The predicament of quality is, wherein the generals and specials thereof be disposed.

The general Rules hereof be five.

1 Quality, is of all absolute antecedents, the most copious and frequent in Nature; for whatsoever we see, hear, taste, smell, feel, all of it is quality.

2 Of all accidents, quality is most accommodate to the sense.

3 Qualities onely have contrariety.

Examples.

4 Qualities have degrees, or more and lesse. And these they have not in respect of the essence, or definition (which is no where varied) but in respect of the existence or singular cleaving to this or that subject, disposed so or so; So Faith in general in respect of the essence, is one and single, without degrees, but faith in this or that person, is greater or lesser, yet retaineth it the same essence and definition in all. For a weak faith, is yet Faith. The like is for other qualities, heat, cold, &c.

5 By reason of qualities, things are said to be like or unlike one another. As men of one colour are said to be alike, but of one stature they are said to be equal.

Quality hath four kinds or specials. 1 Habit. 2 Natural power. 3 Sufferable quality. 4 Figure.

1 Habit is a quality brought into man, whereby he is liable unto those works which by Nature alone he cannot do. Here habit is taken properly and strictly, and not for every accidental form contrary to privation; nor for the habit and stature of the body, nor for apparel, or any general power, which sometime in a large use are called habits.

The general Rules of Habit are two.

1 Unto Habit there is required a certain inclination going before, and a power of Nature.

2 Habit maketh easinesse and cheerfulness in working ought.

Habit is either { begun. a
 { full-ended. b

1 Begun, it is called *Indisposition*, Disposition. Taken here strictly, though sometimes it is largely used for all fitness to any thing, or unfitness also for disposing and ordering parts in method, for degrees of every accident, as when water waxeth warm, it is said to have a disposition to heat.

The

The Rules of disposition be two.

- 1 Disposition groweth before habit, as a Degree thereto.
- 2 It is more easily lost then is an habit.
- 2 Full-ended, or compleat habit, is that which hath got his confirmation and complement. And it is either infused, or gotten or otherwise.

Infused; is that which is shed by the singular grace of the Holy Ghost into mens minds, as Faith, Love and other gifts of God.

Gotten, is that which is gotten by the Humane Industry, precepts and often repetitions of Actions; As the Art of Logick, Rhetorick, &c.

Naturall power, is that which is Active.

in us by Nature: And is { Passive.

Active, is that whereby we are able and apt to do.

Passive is that by which we are apt to suffer or receive ought.

First.

Naturall power also is either

{ Second.

The first power is that which next followeth from the form of the subject, [as in a natural body power to move in a man to speak, &c.

The second power is a disposition of the temperature and instruments by which the first power is brought into act, [as a living creature hath not only the first power of seeing, flowing from the sensitive soul (which it retaineth alwayes) but hath also a disposition of the eye, (which may lost) whereby one seeth clearer then another. Hereto belongs towardnesse of wit, strength of body, originall sin, vertues of Herbs, Gems, &c.

3 Sufferable quality, *passibile*, is that which maketh suffering or passion in the senses, Or it may be called afficient quality, for it affects the senses, as sweet smells refreshes a man, and stenches annoy him. So cold and heat.

4 Figure or form is a certain configuration of the colour and lineament in the body, [it may be called Figure in respect of the lineaments and disposition; and Form in respect of the colour or light.

{ Naturall,

And it is either

{ Artificiall.

D

Naturall

Naturall is the figure which Nature gives every one.

Artificiall is the form which is given by Art: [as the Goldsmith puts Gold into the form of a Ring, Cup, or Chain, &c.]

The rank and order of all qualities followeth.

Quality properly so called, is either { Potential. *
Actual. **

Potentiall is either { Natural.
Brought in, and it is called Habit.

Natural is { First.
Second. b
Manifest, whose causes are manifest, as
First, which is { in a man, facility to learn, to laugh,
either { &c.
Hidden.

Hidden, which is given { Proper temperature: As the Load-
to a thing, either by { stone to draw Iron.
Symperthic, as between the Vine
and the Elm.
Antipathic, as between the Olive
and the Oak.

Second, which { Common.
is either { Singular.

Common is the naturall disposition of the instruments
which every first power needeth, if it should be brought into
Act.

Singular ariseth from the temperature of some persons;
as witnesse, boldnesse, &c.

Habit brought in, { Incomplete, called Disposition.
is either { Compleat, properly called Habit
or Vertue.

Compleat Ha- { Extraordinary, such as was in the Prophets
bit is either { and Apostles, and by the image of God in
man before his fall.
Ordinary.

Ordinary Habit or { Speculative.
Vertue, is either { Operative. n

Speculative

Speculative, is either { In Part, as opinion and knowledge
of some conclusion.
Total.

Total or Aggregative, peculiarly called Science, which
is either 1 Metaphysick: Or 2 Physick, under which is A-
stronomy. 3 Mathematick, under which is Geometry, A-
rithmetick, Optick, Musick, &c.

Operative is either { Practick. A

{ Factive. B

Practick is { More perfect. a

{ More imperfect. b

More perfect, by the special help of { Total. b
the holy Ghost. And is either { In part. i

Total or Aggregative { Absolutely, called Theologic.
is considered { Relatively, called Church-politic.

In part, is called spirituall Vertue, { General. i
and is { Special.

General, and the common directive of all other vertues;
which are 1 Religion, Love, fear of God, &c. 2 Love of our
neighbours. 3 Universal Justice. 4 Prudence.

Special, and it is ordered towards { Our selves.
{ Another.

For our selves:

To rule: { The appetite and pleasure, by Temperance.

{ Anger, by Meeknesse.

{ Fear, by Fortitude, Patience, &c.

{ God.

To another {

Our Neighbour.

Towards God, Worship, Prayer, Profession, Swearing by
him, &c.

Towards our { Superiour: Reverence, Obedience.
Neighbour { Equal: Particular Justice, Peace, Concord,
Kindnesse, &c.
Inferiour: Gentlenesse, Mercy, Liberality, &c

More imperfect, by generall Grace of { Total.
God, and for this life; and is also { In part.

The Art of Logick.

Absolute: Ethicks, or moral vertue.
 Total & Aggre- } The Common-weal, Poli-
 gative, & is ei- } Relative, } ticks, Law.
 ther } unto } Families; as Oeconomicks.
 In part, com- } General, directing & Universal Justice.
 monly called } others, as } Prudence.
 moral vertue, } Special, } Absolute.
 and is } which is } In conversation;

Absolute, about } Fear, Fortitude, Pleasure, Temperance,
 } Riches, Liberality, Magnificence, Ho-
 } nours, Modesty, Magnanimity, Anger,
 } Meeknesse.

In conversati- } Gentlenesse,
 on, *ὁμιλική*, } Kindness.
 as is } Justice particular, } Commutative.
 } Urbanity. } Distributive.

Factive, called } More worthy or Liberal, *a*
 Art, & is either } Less worthy or Mechanical, *b*

Liberal } Is Directive.
 } Or Principal.

Directive and } Forming it Grammatically.
 instrumentary, } Speech by } Adorning it Rhetorically.
 Governing the } Reason, Logick, } Poetry.

Principal, as Medicine; under it } Surgery.
 } Apothecary Art:

Mechanical, } 1 Absolutely.
 which is profit- } 2 Commodiously.
 able to live ei- } 3 Comely.
 ther } 4 Pleasantly.

1 Absolutely: As, 1 A Midwives Art, 2 Husbandry,
 3 Shepherdry, 4 Hunting, Fishing, Fowling, 5 Milners Art,
 6 Baking, Brewing, Butchery, &c.

The Art of Logick

37

1 As the Art of Printing, 2 Warfare
3 Building, 4 Book-binding, 5 Mer-
chandize.

2 Commodi-
ously, of which
some be } Mean, As 1 About Metals, Minerals,
Smiths, &c. 2 About Wood, Carpenters,
Joiners, &c. 3 About Wooll, Cloth-
makers, &c. 4 About Stones,
as Stone-hewing, &c.

Base. As Curriers, Shoemakers, Sad-
lers, Barbers, &c.

3 Comely, as 1 The art of Painting, 2 Carving,
3 Graving, &c.

4 Pleasantly, as the art of 1 Singing and Minstrelle,
2 Dancing, 3 Gaming, &c.

Actual quality, & Affecting the Senses
is either } 1 Conforming.

First.

Affecting is

Second.

More effectual, as

Light.

Cold.

Heat.

Moistnesse.

The first is
either

Lesse effectual, as

Driness.

1 Near: as Thinnesse, Thicknes, Light-
nesse, Heavynesse, Softnesse, Hardnesse.

The Second a-
rises of the first: } Smoothnesse, Roughnesse, Slipperi-
nesse, Clammynesse, Driness.

either } Further off: as, 1 Taste, 2 Smell.

3 Colour: 4 Sound.

Hot: as Acrimony, Bitternesse, Sal-
nesse, Sweetnesse, Fatnesse.

Cold: as Sowernesse, Austerity, 1 A-
cridity.

Simple, Sweet or Sinking.

Mixt.

Intentional, as they are 1 Glasse,

that appear in 2 the Rainbow.

3 Colour, which
is either

Red and true, & Simple

and is either 2 Mixt

The Art of Logick.

Whitnesse, }
Simple as }
Blacknesse. }
Exactly, as red- }
ness, } exceeding }
Mixt of the }
former two } Inequality, with }
either } one of the }
First & redness, } wanting as }
and that either }
Direct. }
Reflexive, as the Echo.

4. Sound, which is }
Direct. }
Reflexive, as the Echo. }
Direct is either, 1 Simple, as high and low, or 2 Mixt,
as the mean.

Conforming, }
called form }
and figure, }
which is ei- }
ther }
Naturall & Unperfect, as Meteors in the Air.
in bodies } Perfect, as in Plants, Beasts, &c.
Artificiall, as the figure of a Garment, Table,
Swords &c.

as Action.

Essence.

Action, is the agitation or stirring of a substance, and as it
were, the flowing out and execution of the forces thereof.

The Rules are four.

1 Every Action is taken in hand, and finished to some
End.

2 Every Action is before the Passion, in order of Nature
and dignity: whereupon it is better alway to give than to
receive.

3 Action taketh contrariety: Not of it self, but by and
for the qualities, by means of which the Agent acteth. As
heating and cooling are two contrary actions, because heat
and cold are contrary.

4 Action receiveth more and less. In the same respect
as before.

Action is either }
Immanent and tarrying,
Transient and passing.

Immanent,

Immanent, is which inferreth no real & evident change, outward, such is understanding, willing, perceiving.
Transient is, which inferreth a change indeed, as warming, cooling, burning, &c. Whereby the Patient is changed.

Also Action is either } Dividvall

or Individvall.

Dividvall, which is distinguished as with certain parts of the progressive.

Individvall, which hath not many parts of progressive. So forgiveness of sins is an Individual Action; for it is done in a time inobservable, but sanctification and regeneration is a divided Action; for it is done by degrees and successively in the Elest in this life.

A Table of Actions followeth.

An Action is } Of God, a

either } Of a creature, b

Of God, { Inward,

either } Outward,

Essentiall, proceeding from Absolute Essentiall properties.

Inward or Absolute, not terminative to creatures, } Personall proceeding from personall properties, as

Generation.
Mission.

Outward referred to } Commune, A

the creatures, } Proper, B

and is } General, c

Commune to the three } Special, d

persons, and is } Ordinary, as the Creation,

Conservation, Government of the World.

A Generall pertaining to all Creatures indifferently, and is

Extraordinary, or miraculous.

Extraordinary, when things are either
 Perfected, as raising up the dead, healing diseases.
 Hindred, as the staying of the Sun
Josh. 10. of the fire, *Dan. 3.*
 Used for that which is not of their Nature, as a rock to send forth water: a Virgin to conceive, &c.

Speciall, pertaining to some creatures, as Election to life, calling to Grace, Redemption, Justification, &c.
 The Father to send the Son.
 The Son take our Nature, and be our Mediatour.
 Proper to some certain Person, as

The Holy Ghost to illuminate and sanctifie.

A Creatures action is either of a
 Spiritual, }
 Temporall, } Creature.

General, or common to all, as locall motion.
 1 Spiritual, }
 which is } Speciall of } Angels.
 } A reasonable soul, such as it doth apart from the body.

Angels: } Good, as praising of God, executing his Commandments, &c.

(Evil, as afflicting, and tempting of creatures.

2 Corporal, }
 which is } Superiour, and more worthy, as in the heaven: } Circular motion
 Inferiour. } Illumination by stars:

Inferiour in }
 } General, Alteration. } Pulsion or driving:
 & is either } Local motion } Traction or drawing.
 } right forth }
 } either } Vection or carying.
 Speciall.

Elements, which have their alteration and motion locall.
 In special, of }
 } Mixt things.

Of mixed things that be }
 } Without life, as all operations, mineral and metallical without life or living.

Of living things in } General.
 } Special.
 In the general, as he either } Nourishment, under which be
 } Growth.
 } Generation taken actively.
 Plants, as the operations of herbs, trees,
 In special, of } &c.
 } Animals or living Creatures.
 Animals or living creatures } General. a
 } Special. b

In general, } Sense, active- } Inward } Common sense.
 } ly taken } Outward } Phantasie actively taken.
 } } more worthy, } Seeing.
 } as } Hearing.
 } } less worthy, as } Touching.
 } } Smelling.
 } } Tasting.
 Appetite } of Food.
 Actively taken } Desire } of Generation.
 under which is } Affection *Amor*.
 Respiration and local going.

In special } Of Man. a
 } Of brute Beasts. b
 } Naturall.
 a Man, whose actions are } Habitual.

Natural } 1. Understanding } The apprehension of
 } Inward, as } simple things, compo-
 } be the } sition, and division.
 } 2. Remembring } Discourse } Syllogistical.
 } 3. Willing. } Methodical.
 } Outward, as speaking, laughing, weeping.
 Specula-

Speculation *Intellectus*, contemplation of the Heavens
and other Natural things.

Practises, <i>Regulae</i>	{	Sacred	{	Common, as praying to God, loving of our Neighbour, &c. Ecclesiastical, as preaching, mi- nistring the Sacraments, &c.
		Moral as		Special {

Faction, <i>Modi</i>	{	More worthy, as to read, write, dispute, heal the sick, &c.
		Lesse worthy, as to weave, spin, &c.

Of Brute beasts, which are diverse, according to the
diversity of kinds in Beasts.

Of Passion.

Passion is the receiving of an Action.

The Canons hereof are three.

1 Passion, is received not so much by the condition of
the Agent, as by the disposition of the Patient. So, many
Passions and effects of the holy Ghost are imperfect, be-
cause of us which receive them, not for the condition of the
holy Ghost.

2 Passion receiveth contrariety.

3 Passion receiveth more and lesse.

Passion is either, 1 Transmutative, or 2 Intentional.

1 Transmutative, when some reall change is made in the
Patient.

2 Intentionall, when no real change is made, but onely
a Termination of the Action. Thus a coloured thing is said
to suffer, because it receiveth & terminateth the sight. Some
call this Spiritual and Logical Passion.

The Table of Passion followeth.

Passion is } Perfective. a
 } Defective. b
 In general } Ordina- Government }
 } ry, as } Sustaination } Passive
 Perfective of }
 the Crea- }
 tures, either } In speciall, Extraordinary, as the Sun staye
 } from moving.

In special, of } Spirits.
 } Bodies.

Of Spirits, as } Good Angels, which have their passions,
 of the } joy in God, anger against his Foes, &c.
 } Holy souls, which also have joy, &c. By
 } which they are perfected.

Of Bodies, } Superiour, as Heaven, whose circular motion
 and these } is a kind of passion.
 } Inferiour, and } In General, as all alteration
 } this is either } and motion Passive.
 } In Speciall.

In special, as of the } Elements, in which is mutuall alte-
 } ration.
 } Mixt Bodies.

Of mixt bodies, } Common, as to be heated, cooled, moist-
 which be either } ened, dried, boiled, &c.
 } Speciall, of } without life, as passions of
 } things } Metals, &c.
 } with life.

With life } In general, as Nourishment increasing,
 } In speciall.

In speciall } Plants, as the Passions of herbs, &c.
 } either of } Animals, or things with soul.

Animals

Animals in { General. m
Special. n

Sense, inward and outward, passive.

In general, as the

Appetite
either

Desire *ἐπιθυμία* of

Food { Dry, as hunger.
Moist, as thirst.

Generation, as Lust.

Common, as Pleasure.

Special of good { Present, as joy,
love.

Future, as desire.

Common, as Dolour.

Eschew-
ing and
flying

Special
of evil

present, as sorrow,
anger.

future, as fear.

In special { Of Brute beasts.
Of Man. *

* Of man { Adventitial, as to learn, to receive habit Theoretical.
either { Ingrafted.

Ingraft { Outward, as weeping, laughter passive.
Inward

Receiving of Intellectual Species, &c.

Inward

Reasonable
appetite, or
will

Approving and
following either

Common, as humane pleasure.

Speciall of good { Past, as a good conscience.
Present, love, joy.

Future, hope, desire.

Terrible

ones { Present heaviness.

Future fear.

Indignity, as shame.

Grief of
minde

Speciall ei-
ther of

Another's mercy.

Spirits

Evil Angels, as hatred of God and good men, despair, en-
vie, joy in evil. Torments.

Souls of Reprobates, despair, pains eternal.

Heavenly, as Eclipses of Sun and Moon.

In general, Corruption.

Generally, Rottenesse.

Defe-
ctive &
priva-
tive in

Bodies

Interiour things

In speciall mixt things

Speciall in living things

In general

Diseases

of death { Intempe-
ratenesse

Hot, pestilent, Agues,
Apoplexie, Epilep-
sie, mixt, the joynt
ague.

Ill conformation, as of parts out of joynt.
Solution of that which is continued. As
wounds, impostumes, &c.

Evil concupiscence, ter-
rors of conscience too

In spe-
ciall in
men

all commonly

Calamities, as punish-
ments.

Speciall the Reprobates, as Despair,
Torments.

Relation.

We have seen the Order of Absolute Accidents : now followeth Relation, which is the Union of two or more.

The Canons hereof are fix,

1 Every Relation is more unworthy than any Absolute Accident, and in Nature after it. For Relation is not a thing real by it self, but by the foundation of it, that is, either the subject, or the efficient cause; for every real thing added to another, maketh composition; but Relation added to a Subject, makes no composition; for in God be many Relations, but in him is no Composition. So the name of a Doctor or Captain, given to a man, is nothing but a vain title and shadow, except there be qualities of Learning, Vertue, Fortitude. Also Relation may be taken from a Subject, it remaining safe as it was. So relation of the Sacrament may be taken from the water, and yet be water still. So in us after forgiveness of sins, there remains Original sin, as touching the material thereof, that is, inclination to evil; though the formal of it, that is, guiltiness, be taken away by Gods gracious impuration.

2 Relations do in company and multitude exceed all Absolute Accidents: for infinite references are added both to qualities, and all other Accidents. All disciplines are full of References. In Theologie, all Doctrines have relation, as of sin, of the Law, of the Mediatour, of the Persons in the Trinitie, of Sacraments, of Miracles, &c.

3 Relation by it self is not perceived by the senses. As a man sees a stone in the field, but knows not whether it be a Dool stone, unless he be admonished of it. *Abimelech* saw *Sarah* to be a fair woman, but could not see her to *Abrahams* wife.

The Relate and the Correlate, as they are such, are together both in Nature and knowledge, and so mutually do put or take away one another, as well in being as in knowing. So the Father and the Son, as they are Relate and Correlate, are together, though materially: as the Father is a man, he must needs be before his Son.

Here-

Hereupon Christ saith, *He that knoweth me, knoweth the Father.*

5 Every Correlate doth so answer to his Relate, that the one may be said to be of the other. So *Adam* was the Father of *Cain*, and *Cain* the son of *Adam*.

6 Relations need no local Touching for the bringing in or conservation of themselves. As a Father being in *England*, may have a son born in *France*. *Christ* now bodily in Heaven, hath true and real union and cleaving with his members on Earth. The same body hath also true and real union Sacramental with the Bread in the Lords Supper. So as there needs no Popish Transubstantiation.

Moreover, the Term of the Relation is not to be tied to the Relate, as the Communion with the substance and benefits of *Christ*, is not to be tied to the bread and wine in the Supper; nor the washing away of sins, to water in Baptism.

THE

The Table of Relations Followeth.

Relation is either { Natural, *κατὰ φύσιν. a*
 { By Institution, *κατὰ θέσιν. b*

a	Naturall which is either	1 Of Measure, either	Inward and productive, as is every cause: hither may be referred the degrees of Kindred, which is either	Primary, as Degrees of consanguinity in a line.	Right, as great Grandfather, Grandfather, Father, Son, &c.
			Outward, { Ruling: as every Rule, Square, &c. Adjacent, { Place. cent. { Time.	Secondary, as degrees of affinity, Father in Law, Son in Law, &c.	Side-long, { Equall, as Brother, Sister. Unequall, as Uncle, &c.
a	Naturall which is either	2 Of Convenience. 3 Of Difference. 4 Of Disposition.	2 Of convenience, or, Agreement, and this either in { Substance, called (<i>ταυτότης</i>) the self-same absolutely. Quantity, called (<i>ἰσότης</i>) equality and proportion; Quality, called (<i>ὁμοιότης</i>) similitude. Representation, called Signification, and all Naturall Signes.	3 Of Difference; as diversity and opposition of things.	b By
a	Naturall which is either	4 Of Disposition; or order and situation in the world and worldly bodies.			

A Divine, which is either	Of Power,	b By Institution, } Divine. A either } Humane. B	
		General Regiment of the world, as the Law of Nature.	
A Divine, which is either	Of Confirmation, as touching.	Special, as touching.	The Church, as the Regiment of the Church. The head of the Church, Christ. Christ the Mediator. The Ministers of the Church, to Preach. Minister Sacraments, &c.
			Prophet. Priest. King.
A Divine, which is either	Of Power, and Office, and Dignity.	Of Conjunction, as touching.	The Law. The Gospel. Temporall things, as the Rainbow.
			Gods Word, which is a signe formally considered. Spirituall, as Figures or Types. Sacraments.
A Humane which is either	Of Convention or Consent.	To be rightly, as is	Greater, as Kingdom, King, Prince, Duke, Earl, Consul, &c. Lesser, as Master, Tutor, &c.
			Marriage. State of the Commonwealth. Societies and Confederacies. Contracts, Covenants, Testaments, Obligations, &c.
A Humane which is either	Of collation, either.	To be well, as are	Monarchy. Aristocrasie. Democracy. Societies and Confederacies. Contracts, Covenants, Testaments, Obligations, &c.
			Contracts specially so called, and are either Named. Unnamed.
A Humane which is either	Of collation, either.	signification	Distinction and Disposition: Armies, Order and Method of Diciplines. Vocall, as all Towns formally.
			Simple, as signing or confirming, Seal, Diadem, Scepter, &c. Souldier Coats, Badges, &c. Pawns and Pledges Limits, Bounds, &c.

Highest

Hitherto of the principall Predicaments; now follow the lesse principall, in which onely things by accident and secondarily so called, are disposed.

And they be four. When, Where, Situation, Habit.

The Predicament When, is that wherein are placed things in the Concrete, noting the manner or circumstance of the time. Hereunto belong *Ages*, Infancy, Youth, Old age, parts of the year, Summer, Winter, Spring, Autumn, Morning, Noon, Night, &c. Also the Concretes of *Ages*, as a Childe, an Old man, &c. 7
When.

The Predicament Where, is that wherein are placed things in the concrete, noting the manner or circumstance of place. As *Europe*, *Germany*, *England*, an *English* man, a *Londoner*, an *Ilander*, a *Sea-man*, &c. All Countries and their Inhabitants. 8
Where.

The Predicament of Situation, is that wherein are placed things in the concrete, noting the certain position and order of the parts of the body. As standing, sitting, lying upright, groveling, &c. 9
Situation.

The Predicament of Habit, is that, wherein are placed things in the concrete, noting some artificiall Adherent, As armed, cloaked, booted, spur'd, with a breast-plate, &c. 10.
Habit.

Of the Cause.

We have seen the Order of things: now followeth the Term without that Order, which is no degree of the Predicamental rank.

Inward. *aa*

And it is either

Outward. *bb*

Inward, is that which inwardly cleaveth with another, *aa*
Inwards be the Cause, the Caused, the Subject, the Accident, the Whole, the Part.

A Cause, is that whereon the thing caused doth depend. *Cause*
And so it differeth from a beginning, which hath not alwaies *as 109.*
respect of dependance; as God the Father, may be said to be the beginning of the Son, but not the cause; for the cause and the caused differ in essence, which the Persons in the Trinity do not.

The Canons of the Cause are three.

1 Every Cause is before his thing caused, in order of nature, of knowledge, and dignity.

2 As without a cause nothing is done, so also without it nothing is distinctly known. Therefore God is without Cause; for he is not made, nor done, but existeth of himself.

3 There is a certain Order of Causes, neither is there granted in them a Proceeding to infinite.

There be four Causes. The Efficient, the Matter, the Form, the End.

The efficient Cause, is that whereon & By it self. *m*
the effect dependeth, and is & By accident. *n*

Efficient by it self, is that whereon the effect dependeth by it self.

The Canons hereof be three.

1 No Efficient doth in vain, but all for some certain End.

2 The same Efficient Cause, as it is the same, alwaies doth the same thing.

Idem, quia idem, semper facit idem.

3 The Efficient Cause, properly so called, doth not effect but some good thing in it self. For evil things are not things properly, but defects of things. A Thief puts forth his hand to take another mans goods; this moving of it self proceeds from the soul that moverh, but the disorder [*ataxia*] in this motion, is not from the soul. So the theft is not properly an effect, but a defect and ataxie in the motion, proceeding from the ataxie of the appetite.

Moreover the Efficient cause, as it is a cause, is alwaies a simple thing: so when a man is said to be the cause of his own accidents, properly he is not the cause, but the subject that hath the cause; and things are spoken of him, not as effects but accidents. A man is not the cause of laughter, but the commotion of the heart and midriffe by some ridiculous object known; neither is a man the cause of the faculty of laughter, but a reasonable soul.

The Efficient is 1. The Force and
of it self divided by 2. The manner. } of Effecting.

3. The order.

1. Of the force of effect. & Principall;
ing, it is & Lesse Principall, *ph* *vini* *I* *edi*
Princi-

Principal, whereon the effect principally dependeth, and is chiefly dependent, and is called *Principal*.

Solitary, is that which hath alone the chiefty in producing the effect, and is therefore called the total cause *ὅλην αἰτίαν*. As Sampson was the sole cause of carrying away the Philistines gates. Christ, the whole or onely cause of Mans Redemption.

Partaking, is, which not alone, but with others hath the chiefty in producing the effect, and is called partiall, *μερῶς αἰτία*.

And it is partaking or sociated, either 1 Necessarily, or 2 Contingently.

1 Necessarily sociated, are, when all of them together are needfull, if the effect should be produced.

2 Contingently sociated, are, when there is not need of All, &c. So a man and a woman are causes necessarily sociated in producing a childe. Again, six shorfes may for more pomp be joyned together in drawing a chariot, when two or three are sufficient.

Lesse Principal, is that whereon the effect lesse principally dependeth.

And it is either, 1 Impulsive: or 2 Instrumentall.

Impulsive, is that which impelleth or moveth the principal agent, to do.

Instrumentall, which within moveth to do.

And it is *ἐξωτερικὴν*, which outwardly moveth to do.

ἑνὶ αὐτῷ, is alway a cause within the Efficient himselfe; but, *ἐξωτερικὴν*, is without the Efficient cause.

So of our Justification, the principal Cause is God. The cause *Proëgumens*, is Gods good will and love; for these move God in himselfe to forgive us our sins. The Cause *Procatartick*, is likewise obedience and merit, whereby outwardly he is provoked to take us into favour, seeing his Justice is satisfied for us. So in an Ague, the *Proëgumenon* is some corrupt humour in the veins, the *Procatartickon* is outward heat of the Sun, or the Northern wind, whereby the pores are stopped, and the humour boileth.

3 Instrumentall, is that which is taken of the principal cause, to produce the effect, called *ὀργανικὴ αἰτία*, or *ἄργανα*.

The Canons heretofore are two.

I The whole Instrument serveth for the Action of the Principall Agent, by whom it is directed. Therefore when it serveth not the principall Agent, it loseth the Nature of an Instrument. As men when they oppose themselves to Gods Commands and Rule, are not Gods Instruments, but the Devils. Hereupon note, that an Instrument taketh the determination of his action from his principall Agent. As ink of its own nature blotteth the Paper, but it fashioneth no letter, unlesse the Writer guideth the Pen.

The whole force of an Instrument consists in the use; for then it is in Act a cause, when it is caused; but when it is idle, it is not an Instrument, but some other thing. Instruments have no dignity of themselves, but of the principall cause, and serve not but in use and work; when the principall Agent can use them no more, they are no longer called Instruments, but *quorūque* by homonymy. And all Instruments, because they are indeterminate, are therefore *ἀποσώζονται*, i. e. such as one may use well or ill: as a sword, riches (called of their use *χρηματα*.)

An Instrument is either { Co-operative,
Passive.

Co-operative, is that which by an inward force together is moved in producing the effect. As a servant is an Instrument used by his Master, yet so as he also moveth himself. So the Creatures, though they be instruments in respect of God, yet have they their action distinct from Gods. As Paul calleth Ministers Gods co-workers *συνεργοι*. Unto such instruments often is given the efficacy of the principall Agent, as Preachers are said to convert and save souls when the Lord doth these by them; so Baptism is said to regenerate, &c. by an improper predication; whereof hereafter in the second Book.

Passive is, that moveth not itself at all, in producing the effect; as the earth under us is an Instrument of walking, for a copy to write on other things, or a pattern: some instruments are necessary, some not, as God useth Angels, &c. when as he needeth them not. And it is true the principall efficient cause moveth well by evil instruments, to wit when it needs not the instruments. As God made Joseph Ruler

Ruler of Egypt by his envious brethren; and by Balgam blessed his people; otherwise in necessary instruments such commonly is the action of the principal doer, as is the instrument; so a man cutteth ill if he have a blunt knife; rideth ill if he have a lame horse, &c. Also in divine things, often instruments do move, but it is all one as if they moved not; for the force of the effect is not in them. So Moses staff was moved at the dividing of the Red-sea, but this motion caused not the Sea to part, save only in a similitude. So Peters shadow, Acts 5. Pauls napkins, Acts 19. had of themselves no force to heal the sick.

Also the efficient cause is either

Naturall. a

Voluntary. b

Naturall is, which of the readinesse and necessity of Nature bringeth forth the effect. As fire of necessity naturally burneth, &c.

The Canons hereof are two.

1 A Naturall cause is properly determined unto one of the Opposites; As fire naturally is carried upward, not downward, only heateh and cooleth not. The Loadstone draweth iron to it, and doth not both draw and drive it away.

2 A Naturall cause doth not adde a certain moderation and dilation of the action, but it worketh to the utmost of his power; as fire when it hath fewel, burneth without measure.

3 A voluntary cause is, which doth of certain foreknowledge and consell.

The Canons hereof be three.

1 A Voluntary cause is free and indifferent to an action; so as it may do or may not do. And freedom is two-fold. 1 of Contradiction, and 2 of Contrariety; the first is, when a cause may do or not do; and so every voluntary cause is simply free. But liberty of contrariety is again. 1 Natural, or 2 Moral. Natural when contrary natural effects proceed, as a Physician may use medicines, cooling or heating. Moral is, when men may effect things good or evil, honest or dishonest.

2 A voluntary cause doth by certain moderation; and, at his pleasure, can suspend the action, though occasion be given of doing. So God gives not all his gifts to one, or all wayes punisheth, but deferreth, &c. at his pleasure.

Again, a voluntary cause is free either } Meerly.
 After a sort, }
 Meerly free, which with full appetite willeth and produ-
 ceth the effect:

And it is called, *αἰτίον πρὸς θυμὸν, αὐτοαίτιον, & ἡμέτερον*.
 After a sort free, which willeth and produceth the effect,
 but with an heaue and sorrowfull appetite. As in a tempest,
 a Merchant casts his goods into the Sea to escape Ship-
 wrack.

Moreover, the efficient cause is either } Transmutive,
 } Emanative.

Transmutive, which doth with some notable change or
 motion: as when fire worketh on water and heateth it, &c.

Emanative, when the effects flow without any notable
 change: as, from the soul flow forth the powers of sense,
 understanding, speaking, &c. From the Sun comes light,
 and yet in the soul or Sun is no change.

2 We have seen of the 1 force or manner of effecting;
 now follow the divisions of 2 the orders of effecting.

The efficient cause is subordinate either } Essentially. m

Contingently. n
 Essentially, when the inferiour doth of it self, and ne-
 cessarily depends on the superiour in effecting: as in Gene-
 ration, a man depends on the Sun.

The Canons hereof be three.

τὸ αὐτοαίτιον
 αὐτοαίτιον. 1 In causes of themselves subordinate, there is not grant-
 ed a proceeding to infinite; for subordination presupposeth
 order, and order resisteth infiniteness.

2 Of causes subordinate, the inferiour in causing, hangs
 on the superiour.

3 In causes essentially subordinate, that which is cause
 of a cause, is the cause of the thing caused. This is true on-
 ly in causes essentially subordinate, but false in contingently
 subordinate; for God is not the cause of sin, though he
 be the cause of mans will; which causeth sin, for will is not,
 of it self and as it is will, the cause of sin (for then it should
 sin always) but as it hath defect; so the nature of the horse
 is not the cause of halting, though it be the cause of
 motion.

Causes

Causes subordinate be either { First, a
Second. b

First is that which hath the highest place in the Order of causing; and it is either, 1 simply first, or 2 after a sort.

1 Absolutely first is, which in no respect is second; as onely God.

2 After a sort first, is that which is first in a certain kind onely: as in the moving of living Creatures, the soul is the first cause whereon all other causes and effects in such creatures depend.

The second cause, is that which hangeth on the first, either Mediate or Immediate.

Mediate, when others do come between it and the last effect: It is called, *ἄττοι καὶ δύναμις*, cause in power, for putting it, the last effect is not yet, but onely may be.

And this mediate cause is either { Far off.
Or neer.

Far off, when many come between it and the last effect: as the motion of Heaven is a cause far off of mans walking, &c. For many other causes come between.

This pertains not to the first cause, God; for he is not far from every one, *Acts. 7. 27.* but he walks immediately with every created Agent.

Neer is, when one only comes between it and the effect: as the lifting up of vapours unto the clouds, is a neer cause of rain; for one only comes between, even the resolution of the cloud.

Immediate cause is, which produceth the effect by immediate and next force, called *ἄμεστος ἄττοις*.

The Canons hereof be five.

First, The next cause presupposeth all the causes farther off.

2 The next cause being granted, needs must the effect be granted or taken away, when it is taken away. For the next cause is the cause in Act, and therefore cannot want an effect, any more then a father can want a childe. So then they greatly erre, which strive, that the essentiall Proprieties may be taken away, the forms of the subjects remaining safe, whereas the form of the subject is the next cause

cause of all those properties that are in the subject.

3 One effect hath but one next cause, though it may have many effects.

4 By the next cause, *Accidents* are distinctly and perfectly known.

5 The next cause is enquired, both by sense and observation, and by the Examen of Logick; these two Instruments God hath given men to finde out the next causes, chiefly of Naturall effects.

The next cause, is either { Inward.
Ourward.

Inward, which is essentiall to the subject unto whom it produceth the effect. So forms are always next causes of many faculties in subjects, as a reasonable soul is the next cause of laughing, speaking, &c.

Outward, which is without the Essence of that subject, to whom it produceth the effect; so the next cause of laughter, is a moving of the heart and midriff by some ridiculous object known; and this is called outward, because it is neither the form, nor matter, though it be in man.

Contingently subordinate causes, are when the Inferiour hangs not on the superiour of its self, and its own Nature. As man depends on the Sun, and the picture depends on man; but because this picture depends not on him as a man or naturall thing, but as he is an Artificer onely, therefore the picture is subordinate to the Sun contingently; So is it for mans will and sin; for though sin hang on the will, yet because it hangs not on it according to the preferment of nature, and as it is will, but as it is corrupted, therefore are they subordinate contingently.

Hitherto of a cause by its self; now followeth a cause by accident, which is either in 1 Naturall, or 2 Voluntary Agents.

First, the Naturall Agent; That is called a cause by accident, which brings not forth the effect of its own Nature, but by something that happens to it; as an Ague causeth remperance, not of its self, but by accident; for of it self the cause is the will, bridling the appetite. So knowledge puffeth up; The Law causeth wrath, for it lighteth on them that cannot keep it.

2 In voluntary Agents, cause by accident is, which brings forth an effect besides the intent and purpose, or by ignorance: as a man cutting wood, his Ax-head flies off, and kills his neighbour unawares. Thus *Judas*, *Pilate*, and the *Jews* were causes, by accident of *Christs* Passion and mans Redemption; for they never purposed, nor thought of such a good effect.

Hither belongs Fortune, which sometime is taken largely for any chance: as when a glasse fallerth, and by fortune is not broken: sometime strictly taken, Fortune is the cause voluntary by accident, of that effect which one knew not, meant not, nor hoped for: as a man digging or plowing the ground, findes a bag of gold. Thus many things amongst men may be said to be done by fortune or luck, not in respect of God the first Cause, but in respect of secondary causes.

The Canons of causes by Accident, as well Natural as Voluntary, be four.

1 One end of the same thing may be a cause, both by accident and by its self, in a diverse respect: as the Gospel by its self is the cause of Conversion, by accident the cause of hardening.

2 Every effect of a cause by accident, is reduced to a cause by its self. And thus all chances of Fortune, are to be reduced unto God.

3 Things that be done by chance or fortune, be rare, but of causes by themselves many and often.

4 Causes by accident are infinite and inordinate [*ἀβέβαια ὑπάρματα*]. Some make it a kinde of cause, *Sine qua non*, *αὐτίον ἢ ἐν αὐτοῖς*. But it needs not; for such causes may be referred to instruments, or some other before.

The matter next followeth, which is either { Properly } so called.
 { Improperly }
 { Principal. a }
 { Less principal. b }

2 Matter.
 ὑλὴ.

First, properly so called, is

Principal, which is onely matter, and in no respect compounded.

Second,

Second, which so is matter, as it is also a materiall compound. As a mans body is the matter of a man, though it be all compounded of Elements.

The Canons hereof be two.

First, every second matter depends on the first, viz. in a certain Order of Nature.

2 Every second matter is necessarily determined in a certain quantity to one onely and certain form: So the matter of a man is onely determined to a reasonable soul, and cannot receive any unreasonable, and so in all other creatures; that vain is the *Μετεμύχσις* or transamination of *Pythagoras*, the *Jews*, &c. Hereby is confirmed the doctrine of the Resurrection, when every one shal receive the same body and soul.

The second matter { Far off.
is either { Neer.

Far off, which makes a compound, others coming between. So an humane body is the next matter of a man.

Lesse principall is that, whereof it being changed and not remaining, a thing is made; Called therefore matter, passing away, whereas the other is permanent: so seed is the matter passing away of living Creatures; for it is changed, and as it were perished before the constitution of the body.

And it is either { Far off, when things are made of it from far.
{ Neer, whereof a thing is next made.

As of meat and drink a man is engendred afar off, for of it is blood, & of blood seed, but seed is the next matter.

Matter improperly so called, is in a similitude, and by Analogy or proportion called matter.

The Canons hereof be three.

1 That which Artizens work on in their Art, and are occupied about, is called matter. As the matter of the Goldsmith, is gold and silver: The matter of Idols, is silver, gold, wood, or stone, &c.

2 The

2 The Notion of matter is also often given to Accidents: so three Propositions are called the matter of a syllogism. The two Tables the matter of Gods Law.

3 The name of Matter is also given to a subject where-in the accident is; and the Object about which the Action of a thing is busied.

The form answereth to the matter, ξ Properly. *m*
and is so called ζ Improperly. *n*

3 Form. *m*

Form, properly so called, is a cause that with the Matter constituteth a substantial compound or body: it is called *entelechia* and *λογος τῆς οὐσίας*: And the substantial Form.

The General Rules hereof be seven.

1 Every form properly called is a substance.

2 The form is the chiefest part of the essential compound, whereby it is constituted, and essentially distinguished from all others: Every thing is named not of the matter, but of the form: hereupon the form is called Act; for the Antecedent matter is not in *esse*, but in *power*, till the form come; and this the Greek name *entelechia* meaneth.

3 Unto the Form are due properly the operations of every compounded thing. The form being put, three things are put: 1 the being of a thing, 2 the distinction of it. 3 the operation; and he that grants the form, grants the consequences of it, that is, the proper operations.

4 The Form in a diverse respect, assumes the relation of the efficient cause and end. Of the efficient: in respect of the powers that flow from it, and operations in which the powers cease; and of the end, in respect of the begetter and disposer, who intends nothing but the consequences of the Form.

5 Every Form is more perfect than the matter, and according to Natures scope, before it: wherefore the form is called *species*, *εἶδος*.

6 The Form by it self comes not into the senses; because it is not endued with qualities, which are the Objects of senses: therefore man who begins to understand by sense, is very ignorant of forms, and their names; by reason whereof our knowledge is like the shadow in the Sun.

7 The

7 The Form is not varied by degrees, nor increaseth it by its self, though the whole compound be varied in quantity. For the Form consists in indivisibility; it is like a number, which if one adde to, or take from it, it continueth not the same it was before.

Form is either {
First.
Second.

First Form is, which in Order goes before all other: in Order I say, not of intention, but of generation: This also is called the first beginning active, and the common form of all bodies and Nature.

Second Form is that which follows the first; called also the inferiour and the particular Form, as Nature is called the Universal Form.

The Canons hereof be two.

First, The second Form is not united to the Matter, unless the matter be rightly disposed and prepared.

Secondly, A certain and specifical Form, is determined to a certain matter, so as it cannot be communicated with another, nor go out of one unto another, nor be together in two disjoyned Matters. Mens souls cannot go into the bodies of beasts, &c.

Form, improperly so called is either Natural or Artificial, of which we have spoken in the Predicament of quality. *ἡ εἰρησὶς οἶδος πῶς.* In a most generall signification, Privation sometime is called a form: so every relation in *Philosophy* is called form *Arist. 2.* and formal; as the formal thing of a Syllogism, is, the order of knitting the three Propositions, which are the Material. What formal difference is, shall be shewed after in distinction. *Phys. cap. 1.*

The End is, that unto which the Efficient is ordained. *τέλος ἐστὶ τὸ ἕνεκα, or τὸ τίος ἕνεκα.* End is diversly taken, as for the last or utmost of any thing; here properly we treat of the End of intention, called also the scope.

End.
τέλος.

End is either {
By it self. *
By Accident, *

An end by it self, is that whereunto the efficient and means of their own Nature are ordered:

And it is either so called } Primarily. *a*
 } Secondarily. *b*

Primarily, which the Efficient intendeth to attain [called *Finis*, &c. i. e. *cujus*.]

The General Rules hereof be six.

1 The End moveth the efficient to do; therefore is it called the cause of causes; for Matter without Form is rude. Form, if there want the preparing and efficient cause, is not brought into the matter; but the efficient worketh not, if it be not moved with desire; so without the end, no cause is caused.

2 The end by it self and in its own Nature, is only good and of good. So an End and Good are convertible; for the end is that which we most would: what we most would, is most to be desired, and desire naturally is alwayes ordered to good. All vice wanteth both efficient and end.

3 Whatsoever hath an efficient cause, hath also an end;

4 The end is both cause and effect, in a diverse respect; so the celebrating of Gods Name, is mans action and *eventus*, and yet is also the end of man.

5 The end, as it is an end, is also before and better than the means: before it, not in order of production, but of perfection and intencion: So Justification is before Faith, though also it be gotten by Faith. I say also (*as it is an end*) for otherwise as touching the absolute essence, the means may be as perfect, or more. Christs incarnation and office, hath greater perfection than mans Redemption, absolutely considered.

6 The end and the efficient are causes each of other: the end causeth the efficient, as touching causality, not as touching being, and not causality. Walking before meat is the efficient cause of health, and health is the end or finall cause of such walking.

The end is either } Principal. * 1
 } Lesse principal. * 2

* 1 Principi-

* 1 Principal, unto which a thing is ordered of its own nature, and by first intent of the efficient : as the principal end of the Lords Supper is the confirmation of Faith, and sealing up of Spiritual benefits, with a thankfull remembrance of Christs death.

And it is either { A mean between, a
Last of all. b

A mean between, is, which rendeth yet further. As the intermiddle end of a Souldier, is to fight valiantly ; but this tends to a further end, to get the victory.

And it is either { Work.
Ending of the work.

The work *ἔργον* is a certain thing brought forth by Nature, or by the Artizen : so the house is the end and work of the builder. The ending of the work *ἐντελέχεια*, is the possession and use thereof. As dwelling is the ending of the house.

The last end is whereunto all the rest are ordered, called *ἔχατον τέλος*, and *σκοπιμώτατον τέλος*, the first scope and chief intention.

The Canons hereof are seven.

1 The end, which is last in execution, is first in intention.

2 The last end is necessarily and chiefly good, and chiefly moving or to be desired, *τέλος ἐστὶ τὸ κατὰ φύσιν ἔχατον ἀγαθόν. Galen.*

3 In the last end, both appetite and operation of the efficient is terminate.

4 It gives to all the means, loveliness, order and measure : So tribulations for the Gospel are joyfull, because the end is eternal life.

5 Onely the last end perfecteth both doer and deeds : wherefore we must know the last end, if we would intend and use the middle end aright ; which is against Popish Doctrine of perfection of vertues, even without respect of the last End. *Bellarmin. 5. de grad. cap. 9.*

6 The End being put, all means to the end are put : As, in Gods predestination, whom God hath destinated to Life, he hath also to Faith in good works.

7 The End entreteth the manner of being, and supplyerth places of Form, viz. in those things whole essentiall perfection is in operation.

The last end, is last either { Simply.
{ After a sort.

Simply last, which in respect of all things whatsoever is the last : and this is alwaies the end, and never a mean to the end ; so the seeing and celebrating of God is the last and utmost end wherein mans understanding, will, and desires, shall rest, *Prov. 8.*

After a sort last, which in order of some things is the last : thus the last end of War is Victory and Peace ; the last end of Logick, is the direction of the minde in knowledge.

The lesse principall end, is, whereto things are lesse principally ordered, viz. not of the nature of the thing, but the appointment of the Agent : So the principall End of the Lords Supper, is, a faithfull and thankfull remembrance of Christs death ; but the lesse principall Ends be many, as exercise of Repentance, distinction of the Church from other Companies, &c.

The Canons hercof be two.

1 Lesse principall Ends are not taken away by the principall.

2 One thing may have many lesse principall Ends; and they either sub-ordinate, or well co-ordinate.

The End secondarily so called, is that whereto the End primary so called is intended, called *Finis 2^a cni.*

And it is either of { Imperfection,
{ Perfection.

Of Imperfection is, to whose use and need the thing is intended

intended: In the End *en* to whom of health is the sick man: to the end of the Lords Supper, is faithfull people. So Reprobates are not the end *en* of Christs passion; for the end *en* by destination of the efficient and of its nature, ought to be capable of the end *en*, but Reprobates are not intended by Christ, nor are capable in applying of it, and therefore are removed by Christ, *John. 17. 7.*

Of Perfection the End *en* is, of whom the efficient receiveth perfection; called also the end of assimilation; thus God is the End to whom of all our actions, as the perfecter of them.

- * B. All End by Accident, is, unto which the means are ordained by accident, and not of their Nature. So the End of sin is the manifestation of Gods Justice: the End of Heresies and Atheism, is the illustration of the truth: such Ends are indeterminate and confuse.

Of the Caused.

- Airiatōv, The Caused is that which hangeth upon the Cause, and is
- | | | |
|---|---|----------------|
| The effect.
The Caused is that which hangeth upon the Cause, and is
The effect.
The effect is that which hangeth on the Efficient. | } | The effect. |
| | | The Mattered. |
| | | The Formed. |
| | | The destinate. |

The Canons hereof are three.

First, No effect, exceeds the vertue of its cause: So the Sun, though it hath not formally the heat which it giveth, yet it hath it eminently, that is, something much more excellent then that heat, namely, pure light. Absurdly therefore do the Popish Priests give unto Accidents the power of making a substance; for they say in the Masse, the accidents of Wine in the cup do change the water into another substance.

2 As is the cause, such is the caused; This is meant, I of causes by themselves, not of causes by accidents; therefore it followeth not, to say, This Ship-wright is a good man, therefore he makes a good Ship; for he makes the Ship, not as he is a man or good, but as he is a Wright or Artizen,

2 It is meant in causes natural, and those chiefly particular; so it followeth not, to say the effects of the Sun are hot, therefore the Sun is hot; for the Sun is a universal thing, and not a particular in causing. 3 It is meant of causes doing voluntarily, if they would produce an effect conformably: as a good Ship-wright makes a good Ship if he will. 4 It is meant upon condition and manner of the receiver, not of the thing received; so the Argument follows not from the chief perfection of God to the chief perfection of the gifts in the Creatures; for God works voluntarily, and according to the measure of the receiver, and when we speak here of goodnesse, it is not meant moral goodnesse, but the Natural and Artificial faculty and force of causing, and by this many Canons of effects are to be understood.

3 That for which any thing is so, is it self so much more: αὐτὸ διὰ ὃ ὑπάρχει ἕκαστον, ἐκείνο μᾶλλον ὑπάρχει. This Canon hath three limitations. 1 The cause must be by it self; for it followeth not, This man is drunken with wine; therefore this wine is more drunken; because wine maketh not a man drunken, but by the abuse of it. 2 It is required, that that affection, whereof the cause and effect is named such, be in both. 3 That it receive more and lesse.

1 The Mattered is, that which hangs on the matter. 2 *Mattered*
As the whole compound naturall body, is the caused of the matter.

3 The Formed is, that which hangs on the form. As the 3 *Form*.
said natural informed body.

4 The Destinare is, that which is ordered unto the End; 4 *Destinate*
it may also be called the Ended; for by the End it is determined; so vocation, justification, sanctification, are the Destinates of Eternal Life; for they are ordered as means hereunto.

The Distinctions and Subdivisions of these may be gathered from the divisions of their causes going before; for among Relates, one is known by another.

Of the Subject and the Accident,

ὑποκείμενον.

A Subject is that whereunto an Absolute. a

Accident sticks and is Limited. b

F

Absolute

Absolute is, that whereto an Accident sticketh absolutely, without any limitation of part: So *Christs* person is the absolute subject of the Mediatours office, and all things thereto pertaining; for to be Mediator agreeth to the whole person as it is the whole: So the whole man is the subject of life and death; and it cannot rightly be said the body dieth; for that which is compounded, is also dissolved, and consequently dies, and that is the whole man. So also man is the absolute subject of laughter; and an Animal is the absolute subject of sense.

ὑποκει-
μενον ἐξ
ἀνέγκης.
ὑποκει-
μενον κα-
θόλου.

And it is either } Proper.
Common.

Proper, which is reciprocate with his Accident, viz. so as it be determined to it alone, not larger nor straighter: so a man is the proper subject of laughter, and Animal of sense.

Common is, which is not reciprocate with his Accident, but may have, or not have the accident, as a man is the subject of whitenesse.

b

A Limited Subject is, that whereto an accident is given in part, not absolutely; as a Black-moor is the limited subject of whitenesse, being white but in his teeth; so *Christ* is the subject of accidents limited *χρὶ τι*. As when whole *Christ* is said to be every where, it is by limitation to his infinite Nature, or Godhead; so when he is said to be born, die, &c. it is by limitation to his finite nature or manhood: this the *Greeks* note by the phrase, *κατ' ἄλλο καὶ ἄλλο*.

συμπε-
ρεσ.

An accident is, that which sticketh to the subject; it is called also adjoynt.

The Canons hereof be three.

- 1 An Accident by nature is later than his Subject.
- 2 One Accident in number cannot be in divers Subjects in number.
- 3 One Accident in number goes not from Subject to Subject.

An Accident is either } Proper. m
Common. n

Again

Again proper is so \S Absolutely and primarily,
called either \S After a sort.

Absolutely so called, is reciprocate with the subject of
some certain Species.

The Canons hereof be three.

1 Every proper floweth from the Essential beginnings of
his subject, as the power of laughter floweth from a rea-
sonable soul.

2 Every proper is determined to some certain Species in
Nature.

3 Every proper accident of one Species is communicable
to another that is really divers; every thing to the perfe-
ction of it requireth three things, knit, undivided, 1. Es-
sence. 2. Essential properties. 3. Operations, wherefore a
propriety cannot be communicated, unless first the Essence
of things be made common and confounded.

Absolute proper is either { Perfect.
 { Imperfect.

Perfect, is that which is not only alone and in all, but
always and perpetually in it, as qualities in respect of a na-
tural body: the faculty of wit, will, speech, &c. in a man.

The Canons hereof are three.

1 A subject cannot without contradiction be conceived
under the denial of a perfect proper adjoynt: as I cannot
conceive man without power of wit, &c. But it must imply
contradiction, a man to be no man.

2 It is not possible for perfect Propers to be severed from
their subjects, a moment of time; because they come from
the form of the subject, and the next cause being put, the
effects are put; and contrary, he that takes away proprie-
ties, takes away Nature.

3 Perfect Propers are first in Universals, as reason is in
man generally; then it is in this or that man, more or
lesse.

Imperfect proper, is, that which is in a thing alone, and in all, but not alwayes; as the acts of speaking, laughing, weeping, &c. are onely in a man, and in all men, but not alwayes.

Proper after a sort, which is called proper onely by comparison with another; as it is proper for a man to be two-footed in respect of a four-footed beast. Fewnesse is proper to the Elect in respect of the Reprobates.

Common accident is, that which commonly and contingently is in subjects that be diverse in specie.

The Canons hereof are five.

1 A Common accident floweth not from the Essential beginnings of the subject.

2 It is such as a subject may be conceived under the opposite thereof, without any implying of contradiction: a man may be conceived under the opposite of an Ague without implying contradiction, a man to be not a man.

3 A common accident may be in two divers, specifically distinct, subjects.

4 It is more and rather in singulars than universals; for they flow not from the essence, but from the existence.

5 Common accidents receive degrees; as one man is whiter than another, but one man is not more risible than another.

A common accident is either $\left\{ \begin{array}{l} \text{Separable.} \\ \text{Inseparable.} \end{array} \right.$

Separable, which may easily be separated from the subject; as health from a man, sleep, &c.

Inseparable, which is not easily separated from the subject, though to be separated nothing repugneth, as blacknesse is inseparable in a raven.

Of the Whole and the Part.

Now follow the inward terms, the Whole, and the Part.

The Whole is that which hath ζ by it self. *a*

parts, and it is either ζ by accident. *b*

Whole

Whole by it self, is, which hath parts properly and perfectly so called.

And it is either { Universal.
Co-ordinate.

Universal whole, is a thing common and universal in respect of Particulars ; as an Animal is the whole of man and beast.

Co-ordinate is, which is made of { Ordinary. a
parts co-ordinate in act, and is { Extraordinary. b

Ordinary, which hath ordinary { Essential.
parts, and is { Integral.

Essential, which hath essential parts, as Matter and Form, called τὸ σῶμα ἡσώδης, as a man in respect of body and soul.

And it is either, 1 Perfectly, or 2 Imperfectly so called.

1 Perfectly called, is substantial, which is compounded of Matter and Form. 2 Improperly so called, as an Oration consists of Letters, Syllables, Words, as the Material; and the signification as the Formal. A Common-weal of Magistrates and Subjects as the Material, and of their union by Laws to felicity as the Formal.

Integral, which consists { Perfectly
of Integrant parts, { called,
and is { Imperfectly

Perfectly, which consists of substantial parts united.

The same kind, Homogeneous.
And is either of {
Of another kind, Heterogeneous.

Of the same kind, which hath parts having the same name with the whole ; as every part of water, wine, blood, &c. is called water, &c.

Of another kinde, which hath parts having a name diverse from the whole as a mans body consists of head, breast, belly, &c.

Imperfectly called, is that which consists of parts/imperfect.

And is } Substantial.
 } Accidental.

Substantial, which consists of the Aggregation of substantial parts, as a heap of corn of many grains, &c.

Accidental, when an accident is as it were compounded of other accidents; so the Moral Law is the whole in respect of the ten Commandments; mans conversion is the whole in respect of mortification and vivification.

Extraordinary whole, is, whose parts are united extraordinarily; such a whole is the person of our Mediator Christ, which consists of Natures, as of parts; yet is neither a whole essential nor integral, though it have a great Analogy with the Integral.

The whole by accident, is which is whole improperly and plain accidentally: as the caused, which is divided by his causes; the subject which is divided by accidents, and the accident by the Subject; so heat is the whole in respect of the Sun and fire.

Part.

Parts.

Messe.

A Part is that which is referred By it self, a
to the whole, and is either By accident. b

By its self, which is referred to Subject.
the whole by it self; and is Co-ordering.

Subject is that which is subjected to the universal whole, as a straighter to a larger; so man and beast are the subjective parts of Animal.

Co-ordering is, by whose co-ordination Ordinary,
the whole is made or compounded Extraordinary. †

The Canons hereof be five.

1. Parts as they make their whole, so also they determine and measure it.

2. Parts

2 Parts differ from their whole, though they be taken together: for, the whole is never the constituter, but the constituted, and the parts are alwayes constituters; and the same thing constitutes not it self; also the whole (as it is the whole) is one thing; parts, though taken together, are many.

3 That which is of a part, (as it is a part) the same also is of the whole, viz. according to that part. Note that some things are in the part as a part, that is, cannot be there, but inasmuch, and as long as it cleaves to the whole. Again some things are in it, not as it is a part, but as it hath a substance diverse from the whole; and therefore those may remain, though separated from the whole: of this sort attributes and accidents are not rightly given to the whole, but onely to the part; as it is rightly said, The eye is mixt of humours, is round, &c. for such is the eye, though it be pluckt out of the body; but it is not properly said, the eye seeth, the ear heareth, &c. for those agree to those parts as they are parts and instruments of the whole, which if it be extinct, the eye seeth not, nor the ear heareth. The like is in all other parts, in every essential and integral whole that is one by it self; for in Aggregate totals, as a heap, &c. it is otherwise; for they are not indeed totals; this hath great use in the Doctrine of Christs Person, which is the whole consisting of two Natures; for rightly and really do agree to the whole person the attributes of either Nature; fitly therefore it is said, Christ is omnipotent, as touching his Divinity; Christ died for us touching his Humanity; and this is more aptly spoken thus than in the Abstract.

4 Note, whatsoever is of the whole, is also of the part. Here distinguish between the whole *universal*, and the whole *Essential & Integral*. For whatsoever is in an universal whole, as an Animal, the same is in the parts of *man* and *beast*; but in other totals it is not so; for there, what the whole hath, cannot be properly given to the parts, because such parts receive not the definition of their totals, as in the *universal whole*; it is not fitly said, the soul understandeth, thinketh, pitieth, &c. but the man that hath the soul doth those things; so whatsoever is spoken of whole Christ, or the person of the Mediatour, is not properly spoken of the Humane Nature, nor of the Divine.

§ Every part in respect of his whole, is an imperfect thing ; as the soul and body are things incompleat ; but a man, compleat.

And this part is either { Essential. a
Integral. b

Essential, is, which is referred to § Perfectly } called.
the Essential whole. And is § Imperfectly }

Perfectly, which is referred to an Essential whole, perfectly so called ; as soul and body are perfectly Essential parts ; for they make a perfect Essential whole.

Imperfectly, which is referred to an Essential whole imperfectly so called ; so sound and signification, are the Essential parts of Speech, but imperfectly called, the sound as the Matter, the signification as the Form.

Integral, is, which is referred to an Integral whole.

And is also { Perfectly } called.
Imperfectly }

Perfectly, which is referred to an Integral whole, having quantity,

And perfectly so { Of the same, *Homogenea*.
called. And {
it is either { Of another kind, *Heterogenea*.

Of the same kind, which hath the same Name with the whole ; as every part of flesh is called flesh ; of blood, blood ; of gold, gold, &c.

Of another kinde is, which hath a diverse Name from the whole ; as the parts of a man ; head, hands, feet, &c.

And it is either { Principal.
Lesser Principal.

1 Principal, without which the whole cannot be : As in man, the heart, the brain, &c.

2 Lesser principal, which may be away without the destruction of the whole, as the finger, toe, &c.

Imperfectly so called, is, which is referred to an Integral whole, imperfectly so called, named *μεγες ποτος*, Intelligible part; such parts be the propositions in a Syllogism; the ministering of the Word and Sacraments, are the parts of the Ministry.

An Extraordinary part, is, which is referred to an Extraordinary whole; as the two Natures in Christs person.

A Part by accident, is that which is referred to an whole by accident: as subjects when they are divided by their accidents, and accidents by their subjects, causes by the effects, &c.

Outward Terms.

We have seen the simple terms inward. Now follows the outward term which is preferred unto others outwardly, so as it constituteth them not inwardly; but, in deed and place, is diverse and distinct from them.

The outward Term is either { Adherent. *m* *
Concomitant. *n* *

Adherent is either { *πρὸςκειμενον*, Adjacent. *z*
ἀντικείμενον, Object. *b*

Adjacent, *πρὸςκειμενον*, again is either { Knit together. *1*
Circumstance. *2*
Adjoynt. *3*

1 Knit together, or Connex, is that which happeneth, and is done together with the thing: as with Christs passion the darkening of the Sun, the rending of the veil, &c.

2 Circumstance is, which is about a thing, and to it adjacent, as place and time, named *ἔξω πρὸςκειμενον*; so the circumstances of Christs suffering, were the place, *Golgotha*; the time, *Tiberius* reign; the day, hour, &c. So shadow is the circumstance of the body.

3 Adjoynt, is that which is adjoynt neer to a thing, as the Thorny Crown, Reed, Purple Robe of Christ, &c.

An Object, is about which a thing or operation of a thing is busied.

And

The Art of Logick.

By it self. e
And it is either }
By accident. f

By it self, unto which a thing is ordered by its self, and of its own Nature; such an Object of the Will, is Good, of the understanding, Truth, &c.

Common.
And it is either }
Proper.

Common, is about which many things together are bu-
fied; so the common object of all the senses is greatnesse,
figure, and motion; for these are apprehended and judged
of all the senses in common.

Proper, is which is determined to one, as colour to seeing,
sound to hearing, &c.

Both of them again is }
Primary.
Secondary.

Primary, unto which a thing is first carried; as univer-
fall things, τὰ καθόλου, are the primary object of the un-
derstanding. And God is of the Philosopher (*Ethic. 10.*)
acknowledged to be, κατ'εἶδος καὶ τελειότατον τῆς θεοειδίας
ἀντικείμενον.

Secondary, unto which a thing is secondly carried; as
things singular in respect of the understanding, and things
universal in respect of sense.

Mediate.
Also the object is either }
Immediate.

Mediate, which is objected by means of another: as sen-
sible substances are objects of the senses by means of the qua-
lities.

Immediate, which is objected without any means; so
qualities are objects of the senses, as colour of sight, &c.

An Object by accident, is about which a thing is bu-
fied by accident; and this is meant both in respect of the action,
and of the object; so evil is the object of the will by acci-
dent

dent; for about it the will is busied, not of its own Nature, as it is will, but of vice and defect outwardly accident; thus also the understanding by accident is busied about falshood; the preaching of the Gospel about Reprobates. And of the object, *Sarah Abrahams* wife was sensible by her accident, when the King saw her not as *Abrahams* wife, but as a fair woman, &c.

Concomitant, is either { Antecedent. 1
Consequent. 2

1 Antecedent is, which goeth in order of time before a thing, so as it cannot be the cause.

And it is either { Necessary.
Contingent.

Necessary which goeth before necessarily, either by nature or by will, as Childhood goes before Manhood, Spring time before Harvest, Resurrection before Eternal Life.

Contingent, which goes before a thing contingently; as the rednesse of the evening, in respect of the next day's fair weather, the red lowring of the morning in respect of rain at evening. Such antecedents may be called signes.

2 Consequent is, which followeth the thing, so as it is not the effect. And it is either { Necessary.
Contingent.

Necessary, which needs must follow the antecedent, as in the necessity of Gods decree, Christs suffering necessarily followed his last Supper, death followed his suffering, resurrection his death and burial, &c.

Contingent, which followeth contingently; so fair weather contingently, or it may be followeth the white Moon, for sometime it doth not, &c.

Of simple Terms arising from the first.

Having seen the first single Terms; next follow those that arise, and are conceived by means of the first.

A Term arising from the 1st A Word. 1st
first is either of 2nd A Thing. 2nd

Of a Word.

1st * The Term of a Explication
a Word is } of a Word.
either the 2nd Conjugation }

2nd The Explication of a Word, is either 1st a Definition of a Name; or 2nd a Distinction of a doubtful word; or 3rd clearing of a dark word.

1st A Definition of a Name, is, which turneth up and unfoldeth the signification of a Word, and by a Word, $\chi\tau\iota\ \lambda\acute{\epsilon}\xi\iota\upsilon\varsigma$.
is either by Notation, $\kappa\alpha\iota\ \epsilon\tau\upsilon\mu\omicron\lambda\omicron\gamma\iota\alpha\upsilon$.

Definition by a word, is, which declareth the signification of a word by some other that is more known, either by a Synonymy and Metalepsis, or by a contrary word: As when I say a Condition is a Promise; *Stibium* is Antimony; *Antichrist* is he that is against Christ and for the Devil, &c.

Etymologie.

Definition by Notation or Etymologie, is, which declares the Word by the Original of it; and this not Grammatically, but Logically, for the meaning and explaining of a thing; as Noble is he which by vertue is noscible, famous or well known,

The

The Canons or Etymologie are three.

1. The Etymologie of all words is not to be sought; for many words are primitive.

2. In Etymologies we must not go on without End, but must stay in some that is first; as the *English* word, *Mix*, may come from the *Latine* *Misceo*, and that from the *Greek* *Mixto*. And the *Greek* from the *Hebrew* *מִשַּׁח* *Masach*. And here we must rest; for the *Hebrew* is the first tongue, and many words in it are primitive.

3. Etymologies are taken from the end, effects, proprieties, object, and opposites of a thing; and are therefore from these to be derived, and these by those to be declared; as a River comes from the *Latine* *Rivus*, and both of them from the *Hebrew* *רָוַח* *Ravah*, which signifieth to wet or moisten, because Rivers do moisten the dry Land. *World* so called of *war*-old, because the older it is, the War or worse it is, &c.

Distinction 2.

A Distinction is, the freeing of a doubtful word from the variety of hidden significations.

The Canons hereof are seven.

1. The Distinction of a doubtful word must be first in all consideration of things.

2. When one word or name is given to things of divers Orders and kinds, it is doubtful, and needeth distinction; as if one speak of a Canker, it is to be known whether it be of the Canker-worm, or the Canker-sore, &c.

3. When a word is given to any in a diverse respect, viz. Absolutely, and by relation, it is doubtful, and needeth distinction: as Justification is taken either absolutely, as it is in the Justified person only, *Rom. 4.* or relatively to our neighbour, as he may acknowledge us to be justified by the effects of Faith. *Jam. 2.*

4. When a word meaneth sometime more things, sometimes fewer, it is doubtful: as Faith is sometime largely

ly used, sometime strictly; so Church, Grace, Election, &c.

5 When the opposite of any word is doubtfull, the word it self is doubtfull; as Election to life hath opposite, Reprobation: Election to an Office hath no opposite; therefore Election is a doubtfull word.

6 When a Primitive word is doubtfull, the Derivative is so too; and if one of the conjugates be doubtfull, so is the other; as Faith is diversly taken; therefore a faithfull man or infidel, is diversly to be taken.

7 Distinction of a word, repugneth not the Nature and use of things, neither darkeneth it, but cleareth the understanding of the minde, viz. a good distinction; but evil distinction doth darken and confound things.

Illustration.

8 The clearing or Illustration of a dark word; is the reducing of it to perspicuity.

The Canons hereof be four.

1 When a word is dark by barbarousnesse or Solæcism, it is to be judged by Grammar Rules: as Transubstantiation is a monstrous word, and hath bred as monstrous opinions, so *Opus operatum*; &c.

2 When a word is dark for want of use, let a more usual and safe word be put in place; as the Sacrament of the Altar is an improper word, not to be used for the Lords Supper.

3 When a word is larger or straighter than the thing meant thereby, let another word, if it may be had, be put in the room; as when the word Clergy is applied to the Ministers onely, which is said to be common to all the Saints, 1 Pet. 5.

4 When a word is figurative, not for any need, but for finenesse sake, put a proper word for it.

The Conjugation, *σύνζυγία*, or yoking together of words, is a depending of words yoked & Primitive together. And is 2. Derivative.

Pri.

Primitive, on which another word hangs in deduction.
Derivative, which hangs on the Primitive; as faithfull
on Faith.

Of a word only.
And they are either {
Of thing.

Of word only, when not so much the Natural Order of
signifying is looked on, as the forming of words, one from
another.

Of thing, when there is a union { Primary,
of signification, and is { Secondary.

Primary, which is in which the dependance, both of sig-
nification and determination is observed; of Faith faithful,
and Justice just, &c.

Secondary, In which there is a dependance of significa-
tion only, and not of termination also; as when of vertue
one is said to be studious, gracious, &c.

Of a thing.

The arising term of a thing { Resolving.
without the word is { Conferring.

Resolving is either { Definition.
{ Division.

Of a Definition.

Definitions
δευσιμς.

Definition, is the unfolding, or turning out of the defi-
ned thing.

And it is either { 1 Perfect.
{ 2 Imperfect.

1 Perfect is the unfolding of the thing by essentiall
terms, δευσιμς δε τῆς ἰσας γνωσειμς.

The

The Canons hereof be five.

1 Every defined thing of perfect definition must be by itself, and directly in the predicamental order of things; so then there can be no perfect definition of doubtful things, of Fictions, or Privations, as sin, &c. of things concrete, incomplete, &c.

2 Whatsoever is perfectly defined, is a Species.

3 A Definition must be formed perspicuous and determinate, viz. free from all ambiguity.

4 A Definition should be reciprocal and equal to the thing defined.

5 An essential Definition must consist of things simply before more known, and indemonstrable. Not regarding what we must know, or what this or that man is able to comprehend, but absolutely and simply what is first in nature, and more known according to the Essential Order of things.

Definition hath two Notions and Conceits,

1 The one of agreement or conveniencie, called the Genus.

2 The other of distinction or difference, called the Difference.

The conceit of agreement, or Genus, both of Substances and Accidents, is found by bringing the defined thing into his predicamental Order, and by conferring with his superiours, by the Canons of a true and next Genus.

The Notion of Distinction or Of Substances.
Difference, is either Of Accidents,

In Substances, there is one, onely and simple Difference, which also may easily be known by the same predicamental Table.

In Definition of Accidents, the Difference is taken from the Subject, the Efficient, the End, and Object.

The Canons of Defining Accidents by every of the Orders are nine.

1 Proper Accidents are defined by the Subject made equal, and the next efficient cause,

2 Com-

2 Common Accidents are defined by the mention of the efficient cause.

3 Quantity taken in general, and compleatly, is defined by mention of the subject and the efficient: as that it is a bodies Accident, arising from the extension of the matter. Special quantities, as a line, &c. are not defined, because they are things incompleat; neither is number.

4 Qualities potentiall naturall, are defined by the subject, the efficient cause, and act, unto which they are carried as to an end; As, risibility is the power of man to laugh, proceeding from a reasonable soul.

5 Habits are defined by the end & the object: as Logick is an Art directing the operations of the mind about the knowledge of things; Liberality is a vertue of taking & bestowing.

6 Qualities paible, are defined by the efficient cause, and the subject, if they be proper accidents; as colour is the quality of a mixt body, arising from the tempering together of bright and dark. Smell is an affecting quality of a mixt body, arising from the predominion of a dry thing favouring tempered with moist.

7 Actions are defined by mention of the subject, the object, the efficient and the end; as sense is the knowledge of a sensible object, arising from the receiving of sensible species, by a fit sensory instrument, to the conservation and perfection of the living creature. Sight is a sense about Colour and light, arising from the receiving of both by their species, unto the perfection of the living Creature. Adoration is an holy operation of a Faithfull man, arising from the acknowledgement, and trust of God Almighty, and (in his Son) mercifull, by the holy Ghost stirred up, to the honour of God, and the faithfull mans salvation.

8 A Passion is defined by the subject, and the efficient cause; as, anger is an affection arising from heat of the blood, moved about the heart for some hurt done. Sleep is a passion ceasing from operations in living creatures, arising from the Alimentary, nourishing and profitable humour, inbruing the brain, and as it were congealing the passages of the Animall Spirits.

9 Relations are defined by the subject relate, correlate, foundation and term.

The subject relate and correlate, is wherein the relation is of mutual part; some call it the materiall; as the subject

of marriage, is man and woman; hereupon the Relate and Correlate is the husband and wife.

The Foundation, is, from which the relation riseth, or for which it is in the subjects: the foundation is *ratio referendi*, without which it would be nothing; it is answerable to the efficient cause, and is either neer or far off; as the next foundation of Marriage is the lawfull consent of each party; the far Foundation, is Gods first institution in Paradise.

The term is as the end for which the relation is brought into the subject. it is the office and effect of the relation; so the term of Baptisme is the seal and confirmation of the washing of sins by Christs blood; so marriage is an order or union between husband and wife, established by mutuall consent for procreation of seed, and pleasant society of life and goods.

Description *ὁρισμὸς ὑποχαρακτικός*:

An Imperfect definition is the untolding of a thing by terms lesse essentiall; it is called 5 Principal.

Description: and is either. 2 Lesse Principal.

Principal, which unfoldeth the thing by the Genus, and the Accidents, or the proper effects; as a man is a living Creature that can laugh, go upright, made after Gods Image.

Lesse Principal, is the unfolding of a thing by terms meerly contingent, or outward, without assigning the exact Genus, called *ὑποχαρακὴ παρὰ τὴν εἰδὴν*, shewing not what, but what manner a thing, it is.

And it is either. 1 Of the part of the concrete, or, 2 of the part of the thing. Of the part of the concrete, when a thing by its nature capable of a perfect definition, is yet unfolded to us imperfectly,

Of the part of the thing, when the thing it self is not capable of a perfect definition; as be all privatives, incompleat, concrete, &c.

The Canons hereof be two.

1 Privations are described by mention of the habits whose privations they are; as originall sin is an ataxie, or disorder of the understanding, will and appetite, born with us, and opposite to Gods Image,

1 Con-

1 Concrete accidents are not unfitly described by putting the subject in the place of the genus : as a Minister of the word is a person lawfully called and ordained to the preaching of the word, and administrating of the Sacraments. A Magistrate is a publique person, ordained of God, to rule and defend the Subjects with Justice, Prudence, and Fortitude.

Boetius gathereth from the Greeks ten forms of
Descriptions

1 $\chi\tau\iota$ λέξιν, when the name of a thing is unfolded, as *Antichrist* is he that is against *Christ*. Justification is a reputing for Just.

2 $\chi\tau\iota$ διάφορον, when a thing is declared by its difference; as hatred is that which dureth longer than wrath.

3 $\chi\tau\iota$ μετέωρον, when a thing is said to be that which it is like to ; as a man is a bubble ; the Church is *Noahs* Ark.

4 $\kappa\alpha\iota$ ἀρραίεσιν τῷ ἐναντίῳ, when a thing is declared by removing the contrary ; as vertue is to flee vice ; death is the privation of life.

5 $\chi\tau\iota$ περιέροσιν, by circumlocution ; as *Paul* was the Teacher of the *Gentiles*.

6 Ὡς ἐν τύπῳ, by Example ; as a substance is, for examples sake, a man, a horse, &c.

7 $\kappa\alpha\iota$ ἐνδειαν πλήρους ἐν τῷ ὁμοῦντι, by want of the full of the same kinde. As an Enthymeme is that which wanteth one of the premises to be a Syllogism.

8 $\kappa\alpha\iota$ ἑπαινον, by praise ; as a history is the witness of Times ; the light of Truth, the life of memory, the mistress of life, the shower of Antiquity ; also by dispraise ; as riches are the enticements to evil.

9 $\kappa\alpha\iota$ ἀναλογία, when one thing is said to be another, for mutual similitude : as a man is a little world ; wine is the soul of a Banquet.

10 $\kappa\alpha\iota$ ἐτυμολογίαν, by Notation ; as the World is that which waxeth worse and old,

Of Division.

Division is the resolving of the ζ Perfect. *a*
whole into parts, and is ζ Imperfect. *b*

Perfect, is the resolving of the whole properly so called and perfect, into parts properly called.

The Canons hereof are nine.

1 That which is rightly divided, must needs have parts ; Therefore the truth is ill divided into Philosophical; seeing, it is not an whole thing, but simple and impartible. So Omniscieny into Ubiquity, &c.

2 The divided and division should be without all doubtfulness and darkness ; as works should not be divided into operation, & *operantis* ; nor Faith into Historical, Miraculous, and saving Faith ; not blindness into corporal and spiritual, nor liberty into civil and spiritual.

3 The members dividing should agree with the whole ; therefore Logick is not well divided into Invention and Judgement, seeing these are actions, and Logick a quality.

4 The members dividing should be equal to the whole ; so ceremonies are ill divided into godly and ungodly ; for this contains not the whole Nature of ceremonies, because some are mean or indifferent.

5 The members dividing should be disjoyned one from another ; so a body, is ill divided into head, eyes, belly, heart, &c. for the eyes are contained in that head, and the heart in that body, &c.

6 Division should be made into the next and immediate members : so a body is ill divided into man, beast, and tree ; for many members that come between are leaped over ; for next a body is, either simple or compound.

7 Division should consist of as few members or parts as the nature of the whole that is to be divided will bear.

8 A true division should be made by those things which are in the whole, and not by the things outward and accidents to the whole ; so quantity is ill divided into Mathematical

matical, Physical, and Logical; for Disciplines are accidental, and outward to things; neither is a thing by and by diverse, when it is diversly considered by sundry disciplines.

9 A perfect division is the beginning of understanding, and of constituting the method of things and disciplines.

A perfect division & The whole Subordering.
also is either of & The Co-ordered,

Of the sub-ordering is, which resolveth the general into the specials that are subordered or subjected thereto, as to divide Animal into man and beast.

The Canons hereof are two.

1 The divided must be a general; we must learn to discern the diverse respects and considerations of things from the divisions; as when the Church is distinguished into visible and invisible, it is not properly a division, much less a division of the general into specials; for a Church is a lowest special; but it is only a diverse respect and manner of considering the Church; likewise when a man is divided into inward and outward.

2 The difference by whose means the general is divided, should be essential and proper, viz. not translated from one general to another.

The division of the co-ordered, is which resolves the whole into parts co-ordered: & Essential. *a*
and is either & Integral. *b*

Essential, which resolves the essential whole into essential parts, and is either 1 First, or 2 Secondarily so called.

1 First, is when the Essential whole properly called is resolved into matter and form: as a man into soul and body. And here, the true and next matter and form must be taken.

Secondarily so called, is when an Essential whole improperly so called, is resolved into his material and formal; as an Oration into a sound, or words written, and their signification. A Church into men called, &c. The union of these

these with *Christ*, and one with another by faith and obedience of the Faith; whereof these are the materiall of the Church, those the formall.

Integral division is which resolveth the whole into integral parts; and it is also either, 1 First primarily. 2 Secondly so called.

1 Primary, is which resolveth into parts the entire whole properly called; as the Tabernacle was divided into the Court, the holy, and the most holy.

This manner of partition should be instituted in right order, descending from the more principall and greater parts unto the lesser.

Secondarily called, is, which resolveth into parts an entire whole improperly called, such as accidents be; as a Syllogism is resolved into three Propositions and Terms: the Law into two Tables, or ten Precepts.

An imperfect division is, when the whole is resolved into parts by accident; and it is either: 1 Of the subject into his accidents and circumstances: or 2 Of accidents by their subjects. 3 Or of the effects by their efficient, or final causes: or 4 Of causes by the effects: or 5 Of things by their objects: as 1 Of men, some are tall, some low, some learned, some unlearned, some dwell in hot countries, some in cold. 2 Agues, some are in the spirits, some in the humours, some in the solid parts. 3 The Scriptures, some were written by the Prophets, some by the Apostles. Gardens, some are for profit, some for pleasure. 4 Gods word, either terrifieth the conscience, as the Law; or comforteth it, as the Gospel. 5 Love is either of God, or of our neighbour.

Of the self-same being.

Hitherto of the arising term resolving; now followeth the conferring, whereby thing with thing is compared.

And is either { Consentany.
Dissentany.

Consentany (or agreeing) is when the Identity, *THE*

the, or self-same being of things is looked on.

Identity, is the unity and agreement of things, and is $\left\{ \begin{array}{l} \text{Ordinary. } a \\ \text{Extraordinary. } b \end{array} \right.$

Ordinary in ordinary things, $\left\{ \begin{array}{l} \text{Greater. } a \\ \text{and is either } \text{Lesser. } b \end{array} \right.$

Greater Identity of them, which is are the same in some greater manner, and as it were absolutely.

And is either $\left\{ \begin{array}{l} \text{Formal.} \\ \text{Numerical.} \end{array} \right.$

Formal, is of them which differ onely in evolution of definition, otherwise are the same in all things. As a man and a reasonable Animal.

Numerical Identity, is the unity of one singular undivided thing.

And is either ; 1 Primary. or 2 Secondary.

1 Primary, which simply and properly is one in Number; As Heaven, Peter.

2 Secondary ; Which are one in Number by some outward conjunction. As one Church under Christ the head ; One heap of Corn, &c.

Lesser Identity, is of them which are one after a sort,

And is $\left\{ \begin{array}{l} \text{Inward.} \\ \text{Outward.} \end{array} \right.$

Inward, is of them which agree in some inward manner or Term.

And is either, 1 Subordinate, or 2 Co-ordinate.

1 Subordinate, is of them which agree under the Predicamentall Order, $\left\{ \begin{array}{l} \text{Conjunctive,} \\ \text{and is either } \text{Disjunctive.} \end{array} \right.$

Identity of Conjunctive subordination, is of them which in the Predicamentall order do straight follow one another. As be all Generalls with their subordinate specials: These are called really the same; as a man, & an Animal; for they

are not two disjoyned things, but only subordinated

The Canons hereof are two.

1 They which are really the same, of them the Superior concurrith to the constitution and the definition of the Inferiour.

2^m They which are really the same, fight not in any thing. Identity of disjunctive Subordination, is of them which so agree under the predicamentall Order, that they are notwithstanding disjoyned one from another, as two diverse things.

And is either } Generall.
Or Specificall.

Generall, of them which agree in the Generall, *ὁμογενῶν*, As a man and a beast agree in an Animal.

Specificall, which agree under one lowest speciall: As Peter and Paul agree in humane Species, *ὁμοειδῶν*.

3 Coordinate, is of them which agree } Causall.
in Coordinate Terms, and is } Co-hæfive.

Causall Identity is of them which agree in the causes, or caused: So in 1 Cor. 12. the distinct gifts agree in one efficient, God, &c.

Cohæfive Identity, is either of the Subject, or of the Accident.

Of the Subject, is of Accidents which are in one Subject, *ταὐταῦτοκενῶν*: As the Prophetical, Priestly, and Kingly Office in Christ; this may also be called the same really: So the faculty to understand, to will, &c.

Accidentall Identity is of them that agree in Accidents; as a Moor, and a Raven agree in blackness.

And it is either } Primary,
Secondary.

Primary, is of them which agree in Primary and properly called Accidents.

And

And it is either { Parity.
Similitude.

Parity, is the Identity of things that agree in quantity: As when two men are of like stature, or having a like number of children.

Of Similitude.

Similitude is the Agreement of things in quality chiefly; and then also in action, passion, and relation.

And is either { Absolute.
Parabolicall.

Absolute, is the agreement of things in quality, Action; Passion, Absolutely and simply.

Parabolicall, is when the Accidents of things have a kind of Image among themselves: As Christs Parables, Mat. 13. &c.

The Canons hereof are four.

1 Parabolicall similitude is the most fit instrument for plain and popular kinde of Teaching: Seeing all our Doctrin proceeds from known to unknown, we must needs learn so much the more easily, as that is easie from whence the beginnings of learning are taken, as, are in Parables, sensible things.

2 Every like is also unlike, *Simile non est idem.*

3 Similitude must not be made between things too much dissimilar; As some have compared the ten Commandments with the ten plagues of Egypt.

4 A Parable must be fitted to the Principall scope and intent of the Declarer, and not be stretcht beyond this: As when Christ liketh his coming to a thief, &c.

Similitude

Similitude is either { Simple.
Compound.

Simple, which is between two Terms: As a subtile wit likened to fire.

Compound, which is between four: So a Magistrate is to the Commonwealth in War, as a Governour is to a Ship in a tempest.

Secondary Accidental Identity, is of them that agree in relations: Thus two parts are said to be same, as two Masters, as two Sons, &c.

Outward Identity, is when things agree in outward Terms, as in Time, Place, Objects, Antecedents, Consequents As *Moses* and *Balaam* lived in one age, &c.

Extraordinary Identity is when things agree extraordinarily.

And it is either { Essentiall.
Hypostatical.

Essentiall, is in three persons of the holy Trinity which communicate in one essence in number: Called *ταὺς ὁμοῦς οὐσίας*.

Hypostatical, is when two compleat Natures are united in one Hypostasis, or persons, called *ἑνωσις ὑποστατικὴ*, where of there is onely example in the person of our Mediatour Christ, where the Divine and Humane Nature are said to be the same in Hypostasis: such are called *ὁμωυπόστατοι*; as they that agree in Essence, are called *ὁμωυούσιτοι*.

Of Distinction.

Hitherto of the arising Term Consentany; Dissentany followeth, whereby the diversity of things is understood,

And is either { Distinction.
Opposition,

Distinction

Distinction is the diversity of things without sight.

And it is either { Primarily so called.
Or Secondly.

Secondary is that which is only in consideration and conceit of mind: As when we distinguish in mind the right side of a Pillar from the left; so in light, though it be a most simple quality, we distinguish the form of warming, and of drying. So in the attributes of God from the Essence, and one from another; as when we distinguish between Gods understanding, Willing, Punishing, Pardoning, &c. Though in the Godhead there is properly no distinction indeed; but only thus in reason.

Primarily called distinction, is, which is in things immediately without the mind.

And is either { Ordinary.
Extraordinary.

Ordinary is in ordinary things, as in the Creatures.

And is { Formal. *a*
Real. *b*
Modal. *c*

Formal, is of those whereof one is taken in the definition of another; as between Genus and Species; Species and Singulars, &c.

The Canons hereof are two.

1. They that are formally distinguished, are not as thing and thing, nor as two separated things; as substance cannot be separate from man, &c.

2. They that are formally distinct, do yet communicate in the same nature and properties.

Real distinction, is of them that are as two severed and distinct things.

The

The Canons are three.

- 1 Things that really differ, may be severed one from another, as water from cold.
- 2 They are never subordinate one to another.
- 3 They may receive opposition and repugnancie ; as, man and beast.

Real distinction is either } Inward.
 } Outward.

Inward is of them which differ in inward Terms.

And is } Subordinate.
 } Co-ordinate.

Subordinate, is of them which differ in subordinate or predicamental Terms.

And is either } Generical
 } Specifical } Distinction.
 } Individual

Generical, is of them which differ in the general, far off or neer : As, man and vertue ; For one is a substance, and the other is a quality.

Specifical, is of them which coming of one general, are separated by essential differences, or put under sundry specials : Thus man and beast differ in species. Also Man, and Lion, Horse, &c.

Individual, is a separation of two or more singulars, which also are said to differ in number : As Peter, Paul, James, &c.

Co-ordinate distinction, is, which is made by co-ordinate Terms.

And is } Causal.
 } Subjective.

Causal is of them which differ in cause far off or neer : As man

man and beast differ in form; laughing and weeping differ in the efficient and end.

Subjective, is either of $\left\{ \begin{array}{l} \text{The Subject.} \\ \text{The Accident.} \end{array} \right.$

Distinction of Subject, is when accidents differ in subject; as speaking and bleating, laughing and neighing, &c.

Distinction of accidents, is of subjects that differ in accidents.

And is either $\left\{ \begin{array}{l} \text{Primary.} \\ \text{Secondary.} \end{array} \right.$

Primary, is of them that differ in accidents primarily called.

And it is either, 1 Imparity, 2 Dissimilitude.

1 Imparity is when things differ in greater or lesser quantity; as love excels faith, 1 Cor. 13. The soul excels the body, &c.

2 Dissimilitude is distinction of things after diverse qualities, actions, passions, and the image of all these.

Secondary distinction of accidents, is of them that differ in relations; as when one is a father or a master, another not.

Outward real distinction, is when things are distinguished by outward Terms, as by Objects, Time, Place, Antecedents, Consequents, &c.

Modal distinction, is when not the things so much as the manners of the things are distinct; either things by their manners, or manners by their things.

And it is either $\left\{ \begin{array}{l} \text{Simple.} \\ \text{Comparative.} \end{array} \right.$

Simple, when manners of things are simply distinguished: so essence and existence differ in a simple modal distinction.

Comparative, is when the same thing or quality is distinguished by more and lesse, As between hot and lukewarm.

1 More and lesse do never vary the species; so weak faith and strong faith; *Pau* a child and a man, do not differ in specie,

2 Things

1 Things compared by more and lesse, must not be *Æquivocall*: As the sharpnesse of voice, and of a sword, may not be compared.

3 Things compared by more or lesse, must be of the same species and nature; so it is not meet to compare a Smiths saw to a Carpenters mallet; nor to ask, which was best learned, of *Galen* (a Physician) or of *Bartolus* (a Lawyer.)

Extraordinary distinction, is in things extraordinary.

And it is either between God and the Creatures, or between the essence and persons of the Godhead, or of the persons one from another: God differs from Creatures more than in generall, and agrees onely in Analogy; in the persons there is distinction somewhat like the *Modall*: For *Iustin Martyr* calls the persons *τρεῖς ὑπάρξεις*.

Of Opposition.

Now followeth Opposition, which is the Fighting together of two simple Terms, so as neither the one can agree with the other, nor both of them with the third, after one and the same manner. They agree not *πρὸς αὐτὸ*, nor *χρὶ τὸ αὐτὸ*, nor *πρὸς τὸ αὐτὸ*, nor *ἐν τῷ αὐτῷ ῥήματι*;

The Canons of Opposition are two.

1 Opposites so far forth as they are such, are together.

2 One Opposite helps the knowledge of another in that that is an Opposite. *τὰ ἐναντία παρ' ἑλληλα μάλιστα φαίνονται*.

Opposition is either { Common. *a*
Special. *b*

Common, is contradiction, which is the first opposition of a thing and not a thing.

The Canons hereof are four.

1 Contradiction is of all Oppositions the first, and so the measure of all the rest: Cold and heat were not opposed,

posed, unless Cold were not Heat, and Heat not Cold.

2 Contradiction is of Oppositions the simplest.

3 It wants simply all mean: For between a thing and not a thing, there is no mean thing.

4 It is of all Oppositions the greatest or strongest.

Contradiction, is either {
1 Express.

2 Implied.

1 Express, when the note of denyall is plainly put to one part: As a man, and not a man.

2 Implicit, when the note of denyall being omitted, one part overthrows another: As an unbloody Sacrifice: For that which is not bloody, is not a Sacrifice: In the Catholic like *Romane Church*; Christs every where present Body; for if it be every where, it not a body.

Speciall Opposition, is which { Primary.

is between special extremes; and is

Secondary.

Primary, whose parts are most strongly opposed.

And is either {
1 Privative.

2 Disparation.

3 Repugnancy.

4 Contrariety.

1 Privative Opposition, is the fighting betwixt habit and privation; Habit is the presence of a thing that cleaveth to some certain and fit Subject. Privation is the absence of an habit in a Substance capable of the habit. *ἐξουσία ἀποβολή* or *ἀπουσία*.

The Canons hereof are five.

1 A privative Opposition is neer akin to Contradictory.

2 Privative Opposition admits a Mean; as, to the eye, twilight is a Mean between light and dark; God is neither moveable, nor immoveable, Privatively.

3 Privative Oppositions have extremes of the same Genus, the Habit directly, the Privation indirectly; as sight and blindness.

4 Habit

4 Habit and Privation are about the same Subject ! As because an *Animall* only hath sight, therefore an *Animall* only is blind, not a *stone*, &c.

5 Privative Opposition requires determination of a certain time; neither can privation be given to a Subject but after the time that by its nature and fitnessse it might receive the habit; as none can be said to be bald untill the time by Nature they should have hair.

Privation is either { Naturall.

(Comming otherwise.

Naturall, when that is wanting which the Subjects should Naturally have, whether it be Accident that is due to the Subject, or a part required to the constitution of the whole.

And it is again, either, First totall, or Secondly after a sort.

Total privation, is from which there is granted no ordinary regresse to the habit.

The Canons hereof are three.

¹ Total privation is properly of dispositions, or powers only.

2 Total privation is beside Nature

3 From privation to habit no regressio is granted: *As*, he that is once quite blind, can never see more, viz. ordinarily.

Privation after a sort, or in part, is when an ordinary, and easie regresse is granted from the privation to that habit. As darkness of the night, which at morning returns to light; so sleep to awaking, sickness to health, &c.

Privation adventitious, or coming otherwise, is of a thing outwardly cleaving; as poverty is the privation of riches, imprisonment of liberty, &c.

2. Disparation is an opposition of Specials, arising from the division of one General by opposite differences; as a man and a beast are disparates, or disjunct.

The Canons hereof are three.

Disparates never agree to the same things as they are Disparates ;

Disparates; So, bread is the body of Christ, cannot be spoken substantially, but onely relatively, as bread hath relation to Christsbody.

2. Compleat Disparates do not concur as body and soul to make a man; so God and man concur to one hypostaticall thing in Christ, but not essentiall.

3. Repugnancy is opposition either between one Disparate, and the property of another, or between two or more properties of Disparates, and also properties of contraries, and their antecedents and consequencies: As to feign, and to be indeed a friend. to be elect, and to fall from the grace of God; To be bread, and to be born of the Virgin: To be prudent, and not to be able to dissemble anger; for this is Repugnant to prudence.

4. Contrariety is an opposition between two qualities that drive out one another.

And it is either { By it self.
By Accident.

Contrariety by its self is of qualites by themselves, and absolutely taken,

The Canons hereof be eight

1. Of contrariety, each part is positive, as hot, and cold.

2. Of contraries, both are under a certain general, neer or far; As white, and black are under the general of colour.

3. Contraries are about the same subject, viz. either the generall or the speciall; But not always about the same in number, or those things which onely differ in Accidents: So white and black are in the same mixt body generally taken, but not in the same body in number; As a Swan, and a Raven, &c.

4 If one of the contraries be, the other also must needs be, or at least have possibility to be: If in nature there be fire, there must also be water.

5 Contraries cannot be in the same degree that excell; But may be in degrees that are remiss: So what is hot in extremity, is not cold at all,

6. One contrary if it overcomes, corrupteth another,

H

7. The

The Art of Logick.

7 The remission of one contrary often comes to pass by the weakning of the other.

8 Contraries have contrary Causes, Effects, Properties, and next Subjects: So Vertue is of God, Vice of the Devil, Temperance helps health, Intemperance hurts it, &c,

Contraries by themselves, are either	}	Mediate. Immediate.
---	---	------------------------

Mediate, which do admit a Mean, *viz.* of taking part with the extremes; as heat and cold admit between, lukewarmness

Immediate, which do not admit a Mean: As Vertue and Vice.

Contrariety by accident, is which agreeth unto other things for the qualities: as fire and water are contrary, because of heat and cold.

The secondary opposition is betwixt the Relation and the Correlate.

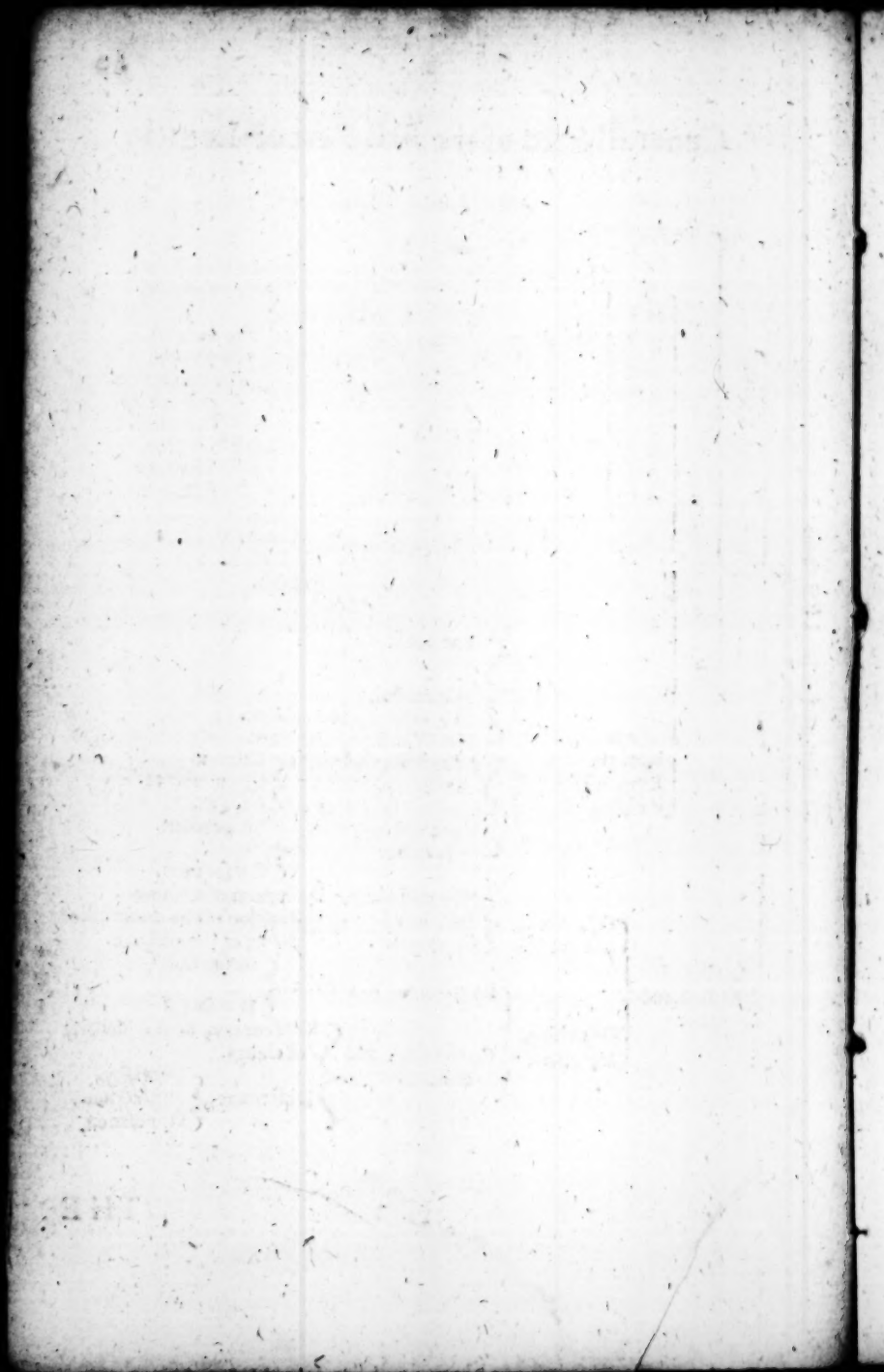
The Canons hereof be three.

- 1 Relative opposition is of all the weakest.
- 2 Opposites relatively have no Mean, *viz.* which takes part of the extremes, as Father and Son,
- 3, Opposites relatively are both affirmative.

And thus much of the simple Terms of the first part of Logick.

A Generall Sum of the first Part of Logick.







THE SECOND
BOOK,
 Handling the Second Part
 OF
 LOGICK;
 Which is a Director of a
 Compound conceit.

Of a Proposition.

THe second Part of Logick directeth a compounded conceit, which is done by Precepts concerning a Proposition.

A Proposition is a sentence wherein one thing is affirmed or denied of another,

And it is considered either $\left\{ \begin{array}{l} \text{In general, and is called} \\ \text{Formal. } a\ a \\ \text{In Special, and determin-} \\ \text{narly called material. } b\ b \end{array} \right.$

In Generall, when the disposition of a sentence is looked on nakedly, and absolutely, without any special condition of the things themselves,

a a

And is again either { Primary, or simple, and Categori-
cally perfect. *c c*
Secondary, or Compound, and Hy-
pothetical, and Imperfect. *d d*

c c

Primary or Simple, is, which in one simple Composition propoundeth any thing to be, or not to be. Of this we are to consider both the 1 Constitution, and 2 Division, and also the 3 Affections.

Constitu-
tion.

The Constitution of a Proposition is of the parts, and the disposing of the parts, of which those may be called the material, and this the Formal.

Material.

The Parts are either the Signed, or the Signers, or Signs.

The parts Signed, or Absolute, are { The Antecedent, or Subject.
The Consequent, or Predicate, or Attribute.

The Subject or Antecedent, is, of which anything is pronounced.

The Consequent or Predicate, is, that which is pronounced of the Subject; As in this sentence, True faith doth work by love: the first part, *true faith*, is called the Subject, or Antecedent; the latter part, *work by love*, is called the Consequent, or Attribute, or Predication.

The Canons of the Subject and Attribute are two.

1 That is the true natural subject (or antecedent) in a Proposition, which without the proposition, even in the Nature of things is subjected; And that is the true Natural attribute or consequent, which in the very Nature of things is in another: and if in any Proposition that be put first, which is not first in Nature; or last, which is not last in Nature: it is called a proposition against Nature, and Inordinate, which must be marked and brought into order; as, *It is not good for man to be alone*: Here good is not the true Antecedent or Subject, but the Loneliness of the man, of which it is said that it is not good.

2. The Consequent or Attribute must be diverse from the Subject : For the same is not to be pronounced of the same; as a *Sword* is a *Sword*; no though it be in other Terms as the *Gospel* is *glad tidings*. *Stibium* is Antinomy.

The Signing parts of Signs be either { Significant, Categorematical.
Consignificative, Syncategorematical.

A Significant Sign, is which represents to the mind a certain Antecedent and Consequent.

And it either { A Noun.
A Verb.

A Noun is a simple word, signifying a certain and absolute thing without time.

The Canons of a Noun are six.

1. A Noun is a simple word, and never a whole sentence.

2. A Noun should be instituted to signifie some certain thing, by institution of God and man.

3. A Noun should be one in Unity of Signification, not equivocal.

4. A Noun should be of finite Signification.

5. A Noun of the first or right case, is properly a Noun i.e. Nomina, in Latine.

6. A Noun by it self signifies not distinction of time. Case,

A Verb is a simple word, inferring with the principal signification of Action or Passion, Distinction of time.

The Canons hereof are four.

1. Every Verb includes in it some Noun or Signification of a certain thing : As *I speak*, Includes in it *Speech*.

2. A Verb beside the conceit of some certain thing, notes fitness of avouching of some other.

3. A Verb primarily infers with it a certain distinction of the time present.

4. A Verb of the Indicative mood is of all, most fit for Enunciative composition and division.

A Consignificative Sign, is, which signifies no certain thing in the Proposition; But the manner only of a thing; As, all, none, some, &c

Formal.

The Formal thing in a Proposition, is A disposing of the Parts to others: And it is either Signed or Signing.

Signed, is, the Order of the parts of the Proposition absolutely looked on in the mind, agreeing with the order of things without the mind.

Signing is, an outward note of this Disposition & Order. And it is either Express or Included in the Verb.

Express, when the antecedent is put with the consequent, by mean of the Verb Substantive [is] as, Faith without works is dead.

Included, is, when a Verb Consequent, or Attribute, is immediately added to a Noun Antecedent or Subject, As for Peter runneth, understand, Peter is running.

*Division
from the
Material.*

Thus have I shewn the constitution of a Proposition.

Now followeth the Division, taken partly from the Material, partly from the Formal.

Of the Material, a Proposition is either $\left\{ \begin{array}{l} \text{Finite.} \\ \text{Infinite.} \end{array} \right.$

Finite, is, which consists of a finite Antecedent and Consequent.

Infinite, which consists of an Infinite Term: as, Faith justifieth, faith is not without works, these are Finite. But, Peter will do any thing rather than deny christ: This is an Infinite affirmation. Man was able not to sin, and man was not able to sin; the first is an Infinite affirmative, the later a Negative.

Both of these is either, 1 Universal, 2 Particular, or 3 Singular.

1 Universal, whose Subject or antecedent is universal,

And is either $\left\{ \begin{array}{l} \text{Definite. } a \\ \text{Indefinite. } b \end{array} \right.$

Definite

Definite, which hath the Sign of Universality expressly added to the Subject : *As all, every one, none, &c.*

This Consignificative not *all*, is either $\left\{ \begin{array}{l} \text{Distributive. } c \\ \text{Collective. } d \end{array} \right.$

Distributive, when it signifies that the Consequent may be distributed into those things which are contained in the Antecedent.

And it is again either distributive into Singulars of the Generals, or into Generals of the Singulars.

Distributive into Singulars of the Generals, is which signifieth that the Consequent is distributed into every singular thing contained in the antecedent.

And it is again either $\left\{ \begin{array}{l} \text{Restrained, or Limited.} \\ \text{Absolute.} \end{array} \right.$

Absolute, when a thing to which the note of Universality is added, is absolutely distributed without restraint; As, every man is a living creature.

Limited, when there is a restraint included to be understood : As *Psalm 8. Thou hast put all things under his feet.* Yet he himself is restrained that put all things under, *1 Cor. 15.* So, No man received his Testimony, meaning no Reprobate man, &c.

Distributive into Generals of the Singulars, is when the Consequent is distributed not into every singular thing, but into certain Orders and Estates of the Singulars; as, every beast was in *Noahs Ark*, that is, not every Singular or Particular beast; But some singulars of all sorts of Beasts. Christ cured every disease, that is, every kinde of disease; God would all men to be saved, that is, all sorts of men.

Collective, is when the antecedent is so taken under a numbering Collection, that the Consequent cannot be distributed into the Inferiors: As, all the Apostles were twelve, all the Evangelists were four, all the Commandments were ten; of this we cannot gather, *Peter is an Apostle*, therefore he is twelve.

The Canons of an Universal Sign are these.

A Note or Sign of Universality is not added to the Consequent: As we cannot say, *every man is every living Creature*; But here it must be excepted, if the Consequent be a Verb Adjective; For we may say God preserveth *all men*, Christ redeemed *all the Elect*, &c.

1 Adverbs that have the place of a Noun, make also universal propositions: as, Never do the Godly want affliction: No where are the Saints free from troubles?

2 Every Note Collective, as also Distributive into Generals of the Singulars, Imperfectly, and Secondly, do make an Universal Proposition.

An Indefinite Universal, is which hath an Universal Subject (or Antecedent) without Note.

The Canons hereof are two.

1. The chief force and use of Indefinites is in Propositions of the Idea: That is, in such, as where the Universal Subject is taken absolutely: As, The Lords Supper is a Sacrament, Man is the Noblest Creature, The soul of man is immortal, &c.

2. There is also an use of Indefinites; to signify that the Consequent is in the antecedent, for the most part, though not alwayes. *ὡς ἐπὶ τὸ πολὺ*. As, The *Cretians* be lyars, Mothers are too much Cockerers of their children, &c.

2. A Particular is, which to a particular antecedent adds a particular Note: as, Some men fear God, Few are Elected, not many are Called, &c.

3. A Singular is, which hath an Antecedent singular or undivided: as, *John Baptist* is not the Christ; This man is a true Christian, &c.

The Canons hereof are two.

1 When a Note of Universality is added to a singular Antecedent, it means nothing but a Collection of singulars: as all *Pharaohs* were Tyrants. All *Herods* were cruel.

2. To the Antecedent of a singular Proposition, may not be added a denial Infinite,

From

From the Formal, a Proposition is divided into $\left\{ \begin{array}{l} \text{Affirming.} \\ \text{Denying.} \end{array} \right.$

Division
from the
Formal.

Affirmative is when the Consequent is joyned with the antecedent.

The Affirmation is before, and more worthy than the Negation.

Denying or Negative, is which divideth the Consequent from the Antecedent, As, Good works do not justify: A man is not a stone.

The Canons are two.

1 That a Proposition may be a Negative, it is necessary that the Particle of denying be either set before the whole Proposition: as, No Elect are damned; or be immediately added to the Coupler, and Verb adjective that hath the force of the Coupler, or Band; as, Marriage is not a Sacrament; Works justify not.

2 Every true Negation hangs on a true Affirmation: For it could not rightly be said, *works justify not*, unless it were true, that *Faith only justifieth*.

Both of these (Affirmative and Negative) is either $\left\{ \begin{array}{l} \text{Pure.} \\ \text{Modal.} \end{array} \right.$

Pure, is, wherein the Consequent is purely disposed with the antecedent, without the expresse manner of disposition.

Modal, is, which is affected with a certain mood or manner of disposition.

And it is either $\left\{ \begin{array}{l} \text{Primary. } a \\ \text{Secondary. } b \end{array} \right.$

Primary, is, which is affected with some Primary manner, as be those four.

- 1 Necessary, or needs,
- 2 Impossible,

a
1 ἀνάγκη
καὶ
2 ἀδύνατον.

3 Possible.

3 *δυνατόν*.
4 *ἐνδεχόμενον*.

3 Possible.

4 Contingent, or perhaps.

1 As, It is necessary that a Creature be finite. The Elect must needs be saved. 2 It is impossible that God should be created. 3 It is possible for him that fighteth to win the victory. 4 It is contingent for a man to sit, for he may also not sit.

The Canons of those Modal propositions are five.

1 There is more use of those Modals among the Greeks than the Latines.

2 No other Modes (or manners) are here looked on than Formal, that is such as affect the disposition of the Consequent with the Antecedent.

3 A Modal Proposition hath the *manner* for the Consequent indirect, and by Analogie so called: in every Modal Proposition, there are two things, the *Saying*, and the *manner*; as in this, *It is impossible that the Elect should be deceived*. That the Elect should be *deceived*, is a *saying*; *impossible* is the *manner*; the *saying* is put in stead of the Antecedent, the *manner* in stead of the consequent, but this must narrowly be taken.

4 The quantity of a Modal proposition is esteemed partly by the *saying*, partly by the *manner*; but chiefly and properly by the *saying*, as that which hath the quantity of multitude. Secundarily by the *manner*, as that which hath the quantity of time; *Necessary* hath the force of an Adverb universally affirming; as, It is necessary for a man to be reasonable, that is, a man is always reasonable; *Impossible*, hath the force of an universal Negative, as, It is impossible for a man to be a *Stone*, that is, a man is never a stone: *Possible* and *contingent*, have the force of *particulars*, as *sometimes*, *for the most part*; &c.

5 The quality or affirmation and Negation of a *modal proposition* is esteemed by the *manner*: as It is impossible for the Elect to perish. This is a *Negative*: It is necessary that Christ should be true man, this is *affirmative* by reason of these *Manners*, *Necessary* and *Impossible*.

Secondary

The Art of Logick:

109

Secondary Modals which have a secondary manner, are either

{	1 Exclusive.
	2 Exceptive.
	3 Restrictive.

Exclusive, which hath an exclusive significative word, as *only, alone, &c.*

And it is Exclusive either of the

{	Antecedent or Subject.
	Consequent.

Exclusive of the antecedent, is, which with an exclusive word set before it, excludes or shuts out other antecedents from participation of the same consequent: as, *Only faith justifieth; Only God is uncreated.*

The Exclusive of the antecedent, excludes not concomitants, or them that accompany the same: as *only the Father is true God*, excludes not the concomitant, the Son and the holy Ghost, but false gods, idols, &c.

Exclusive of the consequent, is, which by a sign of Exclusion put between antecedent and consequent, excludes other consequents from the same antecedent, as, *Reprobates do evil only; Carthusians do only eat fish.*

2 Exceptive, is, which consists of an excepting particle, as *Except, Besides, Unlesse, &c.*

The Canons be four.

1 In an Exceptive proposition, alway the antecedent is excepted from participation of the consequent, and not contrary as was in the Exclusive.

2 The antecedent excepted must be contained under the Excepter: For it is foolish to say, *Every man, except a beast, is able to laugh*, because a beast is not contained under a man.

3 The antecedent from which the exception is made, must be an Universall, that it may be distributed: As it is foolish to say, *Some man except Judas is elected.*

4 That which is excepted should be straiter than that from which it is excepted; For it is vain to say, *A man, except a man, runneth.*

3 Re-

The Art of Logick.

3 Restrictive is, which consists of restrain or limitation; *as far forth as, in respect of, according to, &c.*

Limitation is the determination of that according to which the Consequent agreeth with the Antecedent, or not agreeth.

And is $\left\{ \begin{array}{l} \text{General.} \\ \text{Special.} \end{array} \right.$

General, which is conceived with general terms.

Special, which is conceived with special Terms, that is, which pertain to any thing in special, and properly.

And it is either of $\left\{ \begin{array}{l} \text{One Noun.} \\ \text{Diverse.} \end{array} \right.$

Of one Noun, is, which limits the thing by it self, that the Consequent may be understood to agree essentially: As, *A man, as he is a man, hath reason.*

Of a diverse Noun, which limits the Antecedent by something diverse from the Antecedent.

And it is either $\left\{ \begin{array}{l} \text{Essential. } a \\ \text{Accidental. } b \end{array} \right.$

Essential, which is done by an essential term.

And is either $\left\{ \begin{array}{l} \text{General.} \\ \text{Partial.} \end{array} \right.$

General, when it is limited by his Genus: as, *a man, as he is a body, is local*; as he is a living thing, he is nourished; as he is *Animal*, he hath sense, &c.

Partial, when a thing is limited by some part Essential, or Integral: As, *A man touching his soul is Immortal*: Sacraments touching their matter are visible, touching their form are invisible; Christ as man died, &c.

Accidens

Accidental is which limits a thing Accidentally.

b

And is { Inward.
Outward.

Inward, when a thing is limited by some Inward accident either absolute or Relative; as, Fire, as it is hot, burneth; not as it is dry: God willeth hardning of sinners; not as it is sin, but as it is a punishment.

Outward, when a thing is limited by some outward comparison and respect; as when a mean man is said to be great in respect of a dwarf; *Isaac* was a Son in respect of *Abraham*, and a Father in respect of *Jacob*; Faith justifieth as it hath reference to Christ.

The Canons of limitation are six.

1. A Consequent or Attribute contradictory, can with no Limitation, be made to agree with the antecedent. Τὸ ἀπλῶς ἀδωῖαπον, ὅτε καὶ ἄ τι, ὅτε πρ. ὅτε πότε ἐνδέχεται; False therefore are the Popish Limitations to prove that Accidents may be without the Subject in their Transubstantiated Sacrament; For it implicth a contradiction.

2. Every lawfull Limitation should have possibility to be referred to some form of Limitation, delivered by the Art of Logick,

3. A Limitation should be made by that which agreeably is in the antecedent, or Consequent, whether it be in it absolutely, or Relatively.

4. The manner Limiting in part should be distinct in deed and words, from the Limited in the antecedent and Consequent.

5. Limitation should be perspicuous, easie to be explained.

6. Limitation in a diverse respect, pertaineth to the antecedent and Consequent of the proposition Limited.

The Affection of propositions either

{ Consentany. a 3 Af-
Dissentany. b sections.

The

Consentany, whereby propositions agree together,

And is { Equal valour *ισοδυναμία*. *a*
Conversion, *b*

The Canons of equal valor are either { General.
Special.

a General, which pertain as well to the Pure as to the Modal, though chiefly to the Pure.

And they be ten.

1. Equal Valor of Propositions which is taken from the Signs of quantity, is shewed by the signification of the Signs and their mutual correspondence: These therefore are equivalent, *Not every man is elected, and some man is not elected*; there is no man that is not a sinner, and every man is a sinner. *Not any man is good, and, No man is good, &c.*

2. Diversity of words takes not away the equal value of sense, when the things signified by the words in the sense and meaning of the Speaker are the same: These therefore are equipollent, *Bread is the body of Christ, and bread is the Communion of Christs body*; For its Christs intendment, as *Paul* expounds him.

3. Equivalents should have Antecedent and consequent the same indeed: The transplacing of antecedents and Consequents changeth the sense of propositions; For these are not equivalent, to say, *Bread is Christs body, and in bread is Christs body, or Christs body is in the bread*; nor these, *Bread is Christs body, and, let Bread be Christs body, &c.*

4. Of Equivalents, one may be more forcible and significant then another; and yet the agreement of sense remain safe: As these agree in sense, *Bread is Christs body, and read is an holy sign of Christs body*; Though the first hath a more forcible signification.

5. A Proposition of this sign [all] having limitation, is of equal value with the particular, when the limitation is taken away: as, *All men that beleeve shall be saved, and, only some men shall be saved,*

6. A

6 A proposition of the sign *All*, distributing into generall of the singulars, is of equal value also with a particular; as, God would all men to be saved; and, God would some of every sort of men to be saved.

7 A proposition of the sign *All* collective, is equall to an indefinite; as, All the outward senses are five; and there are five outward senses. Note also, that in the Hebrew, *not all*, is equivalent to *none*, as *Psal. 143*. Not all living shall be justified, i. e. no living.

8 Indefinites sometime are equivalent to universals, sometime to particulars; to those in a matter necessary, to these in a contingent.

9 The affirming of a privation, and deniall of an habir, are equivalent in an habile subject; as, He is not just, therefore he is unjust; this is true in a man, not in an infant, nor in a stone.

10 He that puts on: equivalent, puts also the other; and contrary, He that takes away one, takes away the other: so when Christ saith, *Few are chosen*, he saith in effect, *All are not chosen*.

The speciall Canons which pertain to the Modals
only are five.

1 Propositions of necessary and impossible are equivalent when they have the manner of the same spoken of a diverse quality, as, It is necessary that offences arise; and, it is impossible that offences should not arise.

2 Propositions of necessary and contingent are equivalent when they have a diverse quality in a word & in manner; It is necessary for the Elect to abide in Gods grace; It is not contingent for the Elect to abide in Gods grace.

3 Propositions of impossible and possible are equivalent when they have the saying of the same, and the manner of a diverse quality; It is impossible for the Elect to perish; It is not possible for the Elect to perish.

4 Propositions of possible and contingent, in the Greek phrase are often equivalent, when the manners considered in themselves import a diverse signification.

5 In Modals secondarily so called, an exclusive in a necessary matter is equivalent to an universal; as, The elect only are saved, and all the elect are saved.

Conversion.

Conversion, is the agreement of two propositions by transposing of the parts; and it is either 1. simple, or 2. by accident, or 3. by counterplacing. 1. Simple, is the mutuall change of the Antecedent and consequent, the quantity and quality abiding the same; first, and properly about an universall denier, and particular affirmer; 2. And by reason of the matter, about an universall affirmer, necessary and reciprocal; as, No unbeliever eateth Christs flesh; therefore none that eateth Christs flesh is an unbeliever.

2. By accident is the mutuall change of antecedent and consequent, the quality abiding, but the quantity being changed, viz. the universall into a particular affirmer; as, Every man is a living creature, therefore, some living creature is a man.

3. By counterplacing is the mutuall transplacing of the consequent and antecedent, the quantity abiding, but the quality changed, viz. about an universall affirmer; as, All that are ordained to life do beleeve; therefore they that beleeve not, are not ordained to life, Acts 13.

The Canons of conversion are nine, of which the first four are generall, the other pertain to the Modals.

1. That which is to be converted, must have a proper connexion, understood without any ambiguity; these therefore are not to be turned; Christ is a vine; Bread is Christs body, &c.

2. The whole antecedent of that which is converted, must be made the consequent of the converter, not maimed or cut off.

3. In converting, the oblique Cases must be made right; as not because, Some tree is in the Garden, therefore Some Garden is in the Tree; but thus; therefore something that is in the Garden is a Tree.

4. Conversion of Modals is made by change of those extremes which are in the saying, the manner alway abiding fast, and the quality of the saying kept.

5. There is no other conversion in Modals then simple and by accident.

6. Propositions of the manner necessary are converted so as the pure simply, when they are universall negatives, or particular affirmatives; and by accident, when they are universall affirmants, though so also they be simply converted.

as, It is necessary that no man be a stone, is converted simply, therefore it is necessary that no stone be a man.

8 Propositions of possible are converted as the former of necessary.

9 Propositions of contingent, if they be affirmative, are converted as the former, but negatives not so; for particulars are converted simply, but universals no way.

Thus much of the consentany affections,
Dissentany is the opposition of Propositions.

Opposition, is the sight of two Propositions according to the disposition, in affirming and denying.

The Canons heretof be four.

1 Opposition must have the same antecedent and consequent understood without ambiguity; as, It is not good for man to be alone; it is good for man to be alone; here is no opposition; for the one is meant simply, the other respectively.

2 Opposition, must be $\chi\tau\iota\tau\delta\alpha\upsilon\tau\delta$ in the same respect, i. e. the consequent must be disposed with the antecedent according to the same part and nature of the antecedent, as, Christ was before Abraham; Christ was not before Abraham: the first is Time, meant as he is God: the other, as he is man; so here is no opposition.

3 Opposition must be $\pi\epsilon\delta\varsigma\tau\delta\alpha\upsilon\tau\delta$ unto the same; as the Sun is darkened, the Sun is not darkened; by limitation both those are true, and not opposite; for in respect of our sight the Sun is darkened, but in it self the Sun is not darkened.

4 Opposition must be in respect of the same time; otherwise both may be true; as, Paul was at Rome, Paul was not at Rome, viz. at the same time.

Opposition is either

Contradictory.

Contrary.

Contradictory $\alpha\upsilon\tau\iota\kappa\alpha\alpha\varsigma$, which is of perpetual disjunction; and it is principal or lesse principal.

Principal, is the sight of Propositions both in quality and quantity, as is between an universal affirmant, and a particular

cular negant ; also between a particular affirmant, and universal negant ; as, All men are good, Some men are not good, &c.

Lesse principal, is between two singulars, two indefinites, and two immediate universals, fighting in quality onely ; as *Peter was at Rome: Peter was not at Rome. A man is good ; A man is not good, &c.*

The Canons of contradiction are three.

1 Contradiction, is of all oppositions the first, the most perfect, and most fighting, and therefore the measure of them.

2 Contradiction, is of eternal dis-junction, so as it is impossible for both parts to be together true or false.

3 Contradiction wanteth all mean.

Contrariety is opposition between two universals, viz. them whose antecedent or subject is manifest without the consequence ; as, Every man is wise ; no man is wise.

2 Two contraries can never be together true, though they may be together false.

The opposition of Modals hath three Canons.

1 Contradictory Modals are, which have the same manner of diverse qualities, but the saying of the same quality ; as, It is not possible for the elect to be deceived, It is possible for the elect to be deceived.

2 Contrarie Modals are, two universals having the same universal manner affirmant ; but the saying in one denying, in another affirming ; as, It is possible to be ; It is possible not to be.

3 In Exclusives (which are Modals secondary) the particular negative added to the only manner exclusive, maketh the opposition : as, Only the elect are reconciled to God ; not only the elect are reconciled, &c.

Hitherto of a simple proposition : now followeth the compound, which consisteth of a sense or sentence compounded.

And it is either { 1 Expressed, 2 Implied, 2

¹ Expressed, which hath the expresse note of composition.

And it is either by conjunction, or particular relatives.
Compounded by Conjunction, is, whose parts are tied by a
 Grammatical Conjunction.

And it is either } Connexive;
 } Separative.

Connexive, whose parts are tied by a connexion, and is

Copulative, whose conjunction is copulative; as, Love God and thy brother.

The Canons are four:

1 A Copulative is affirmed and denied by reason of the i. c. *Propo-*
 conjunction copulative, whereof if a negation be added, it *sition.*
 always maketh a negative; We are justified by faith, and
 not by works, &c. this is affirmative. Not by faith and
 works are we justified; this is negative.

2 The whole copulative proposition is esteemed by reason of the conjunction copulative.

3 To the truth of a copulative, there is required the truth of either part ; and if one part be false, the proposition wholly is false.

4 Copulation noting the time, is to be taken in respect of one and the same time; otherwise the copulation will be false; as, *Paul* was at *Rome*, and saw *Jerusalem*. This is a deceitfull copulation, for both were not at one time; but at several times both were true.

Conditional, is, whose conjunction is conditional: as, If thou sin, thou shalt die.

The Canons are five.

1 A conditional hath two parts, whereof the first is called the antecedent, which contains the condition; the latter the consequent.

2 A conditional putteth nothing in esse; and onely suspendeth the sentence, or sense of the minde, unless the manner and condition be put, which the antecedent designeth.

3 All the truth and force of it, is in the union and coherence of the parts, whereby the consequent rightly followeth from the antecedent.

4 The measure of it is some simple composition, to which it must be resolved, that the force of it may appear, and the reason of the connection be manifest.

5 The affirmation hangeth on the affirmation of the condition; therefore it is then Negative, when the denial is put before the conjunction If, not when it is put after: So, If the Lord keep not the citie, the Keepers march in vain: this is affirmative, not negative.

6 A conditional, having an impossible condition annexed, is equivalent to a simple denial: as, If the sands can be numbered, Abrahams seed shall be numbered, meaning they shall not be numbered.

Separative, which hath a separative Disjoyned conjunction; and is either 1. Discrete.

Disjoyned, whose conjunction is disjunctive; as, either we are justified by faith, or by works.

The Canons hereof be five.

1 The disjoyned parts of a proposition must be subordinate; it is therefore vain to say, Either it is a living creature, or a man.

2 The affirmation or negation is esteemed by the disjunctive conjunction onely, whereof there must needs be added a negation, if the sentence must be negative.

3 For the truth of the disjunctive, it is enough if one be true.

4 That

4 That therefore is false which hath no part true, and wherein taking away one, another member can be given which is true : as, Either the Pope is head of the Church, or it hath no head ; both are false ; and a third is true, *Christ* is the head, *Colos. 1.*

5 When the disjunctive opposition is immediate, and either member is removed, it makes the rest requivalent exclusively ; as, Either we are justified by faith, or by works ; but works are removed, *Rom. 3.* Therefore this exclusive sentence is true, Only by faith are we justified.

A discrete sentence, is, which hath a discrete conjunction ; as, although, yet, notwithstanding, &c.

The Canons are two.

1 To the truth of a discrete is required the truth of both parts.

2 False therefore is the discrete when any one part is false ; as, *Christ's* humane nature is not eternall, yet it is every where present.

Compounded of particular relatives, is, which hath notes of comparison according to quality, quantity, time and place ; as, *Such* as the Shepherd is, *such* is the sheep. He is *as* honest *as* he is learned. Where the treasure is, *there* is the heart. *Then* men fast *when* the Bridegroom is gone, &c.

2 An implied compound sentence, is, which hath no expresse note of composition.

The Canons are two

1 The truth or falshood of an implied sentence, wholly dependeth upon the manner of the consequence, or knitting of the antecedent or consequent ; as, They that are guilty of *Christ's* body, they eat *Christ's* body ; this is a false compound proposition ; for there is no connexion of parts.

2 As much as may be, this proposition is to be reduced to a meer simple.

Hitherto of a proposition common, called *formall* ; now followeth a proposition in speciall, called *materiall* ; which is determined to a certain condition of things antecedent and consequent,

It is divided partly by the words, partly by the things, and partly by both together,

First therefore every proposition is either } Dark.
Clear.

Dark, when the sense needeth Interpretation; Interpretation is the unfolding of the sense or sentence, and bringing of it to clearnesse.

The darknesse of a sentence is cured by six Canons; According to which every lawfull Interpretation is to be made.

1 A dark proposition must first of all be called back to a certain Method of some kind of discipline, and judged by the principles and analogie of the things delivered therein.

2 Interpretation is to be made according to the first intent and scope of the Speaker or Writer.

3 The order of the context is carefully to be weighed, and interpretation to be made by the knitting of the antecedents and consequents.

4 Like places are to be compared together, and by conference and agreement the sense to be set down.

5 Let the agreeing expositions of famous Interpreters be looked unto.

6 The dark places are to be expounded by the more clear, and not the dark by as dark.

A clear proposition, is, whose sense is manifest by its self, and needs no interpretation.

Again each of them is either } True.
False.

True, is, which agreeth to the composition and division of things without the mind, or which affirmeth or denieth as the thing is.

And

And it is either { Connominative Synonimicall,
Denominative Paronimicall.

Synonima, be those that have a common name, and in regard thereof, one and the same essentiall definition.

Paronima, be those that be derived, and have their denomination from others.

Connominative, is, in which the consequent is spoken of the antecedent connominatively, Synonimicē.

And it is either { Notional,
Or Real.

Notionall, in which the second Notion is avouched of the first; as Animal is the Genus, Man is the species, &c.

Real, is, in which the consequent Synonimicall Real is disposed with the Antecedent, As, A man is an animal, Faith justifieth.

And it is { Ordinary.
Or Extraordinary.

Ordinary, in which the consequent is ordinarily disposed with the antecedent: As, A man is an animal; Peter is a man; Whitenesse is a Colour.

Wharsoever is said of the consequent by a Synonimicall attribution, the same may also be said of the antecedent.

Extraordinary, is, in which there is a disposition of the Consequent connominative, with an extraordinary antecedent, viz. the Person of the Mediator Christ; as, Christ is God, Christ is man.

Denominative (or paronimicall) attribution, is, which consists of an attribute (or consequent) paronimicall, as when either difference, or part, or accident, or circumstance, &c. is spoken of the Subject, or antecedent; as, A man is reasonable; a man is bodied, is headed, is booted, is Temporal, is Local, &c. So, Christ is Eternal, is the Mediator;

ator, King, Priest, Prophet : Christ hath redeemed us with his blood, &c.

Each attribution, as well connominative, as denominative,

Is either $\left\{ \begin{array}{l} \text{Proper.} \\ \text{Improper.} \end{array} \right.$

Proper, is, whose disposition and words are proper.

And it is Necessary, or Contingent.

Necessary, in which the Consequent is necessarily disposed with the antecedent.

The degrees $\left\{ \begin{array}{l} 1 \text{ } \kappa\alpha\tau\alpha \ \pi\alpha\nu\tau\acute{o}\varsigma. \text{ Universal.} \\ \text{hereof are} \quad 2 \text{ } \kappa\alpha\delta' \ \alpha\upsilon\tau\acute{o}. \text{ Immediate or of it self.} \\ \text{three} \quad 3 \text{ } \kappa\alpha\delta\acute{o}\lambda\eta \ \tau\acute{\rho}\omega\tau\omicron\nu. \text{ Reciprocall.} \end{array} \right.$

$\kappa\alpha\tau\alpha \ \pi\alpha\nu\tau\acute{o}\varsigma$; Or Universal, is, when the Consequent is attributed to an universall antecedent.

And it is either of the $\left\{ \begin{array}{l} \text{Subject or Antecedent,} \\ \text{Adjacent.} \end{array} \right.$

$\kappa\alpha\tau\alpha \ \pi\alpha\nu\tau\acute{o}\varsigma$, (or Universal) of the Subject, is, when the consequent agreeth to all contained under the subject, viz. Specials or Singulars : as, an animal hath sense, this is spoken of man and beast, as also of all singular men and beasts : Therefore it is an attribution universal, ($\kappa\alpha\tau\alpha \ \pi\alpha\nu\tau\acute{o}\varsigma$) by reason of the subject.

Universal ($\kappa\alpha\tau\alpha \ \pi\alpha\nu\tau\acute{o}\varsigma$) of the adjacent, is, when the consequent is attributed to the antecedent without any exception of time or place : as, Every man is reasonable, this is true in all time and places.

$\kappa\alpha\delta' \ \alpha\upsilon\tau\acute{o}$, Or Immediate, is when the consequent is in the antecedent immediately.

And it is either of $\left\{ \begin{array}{l} \text{The First} \\ \text{The Second} \end{array} \right.$ Manner.

Of the first manner, is, when the consequent is of the Essence or definition of the antecedent: As, a man is a living creature, a man is reasonable, *Melchizedek* is a man, &c.

Of the second manner, when the antecedent is of the Essence or definition of the consequent, and this is either principal, or lesse principal.

Principal, when an accident perfectly proper is given to the subject: As, a man laugheth, weepeth, leaureth, &c.

Lesse principal, when an accident imperfectly proper, is given to the subject; as a man is risible, and every risible thing is a man: This is the highest degree of necessity; noted therefore with two titles, *καθόλου* and *πρώτον*.

Καθόλου, Universe, respecteth the consequent, and signifieth that it is wholly, and every whit drawn up of the antecedent, so as it is neither straighter, nor larger than it. It is not therefore *καθόλου* when I say, *A man moveth*: For moving is also without a man, and is not all contained in him; nor is it *καθόλου* when I say, *A man is learned*; for this consequent is more narrow than a man, and extends not so large; Seeing there are many men that are not learned.

The other term *πρώτον*, I respecteth the subject or antecedent, and saith that that is the only and sole thing, of which the consequent is strictly spoken, so as there is no other subject to whom it is rather than to this, as there is no subject wherein laughter rather and nearer is; than a man.

The Canons of necessary propositions are six.

1 A Necessary proposition, is not onely affirmant but also negant: As, Christs body is not every where; *A man is not a stone*. In affirmatives it is *τὸ ἄνθρωπος*; so in Negatives it is *τὸ ἄνθρωπος*, in none at all.

2 Of necessary avouching, some is pure, some mixt of necessity, and contingencie: As, *A man laugheth*: this is mixt.

3 In pure Necessaries the couple or word *Is*, is freed from all difference of time or place, and from all existence.

4 A necessary consequent can in no respect, limitation,

tion or Distinction be denied of the antecedent : as, A body is finite.

9 The latter degree of necessary propositions, is alway more perfect than the former which it includeth : So a perfect $\kappa\epsilon\delta' \acute{\alpha}\nu\tau\omicron$ includeth a $\chi\tau' \pi\acute{\alpha}\nu\tau\omicron$, and a $\kappa\epsilon\delta' \acute{\alpha}\nu\tau\omicron$ includeth both a $\chi\tau' \pi\acute{\alpha}\nu\tau\omicron$, and a $\kappa\epsilon\delta' \acute{\alpha}\nu\tau\omicron$.

6 Necessary attributions have the force of principles or beginnings ; A Contingent proposition, is, wherein the consequent is contingently, or changeably disposed with the antecedent.

The Canons hereof are three.

1 A Contingent attribution hath such a consequent as may without contradiction be separated from the antecedent, when it is affirmative, or be given to it when it is Negative.

2 Contingent propositions chiefly consist of common accidents, and integral parts lesse principal, and of adherents : As, A man is white, is bearded, booted, &c.

3 Contingent propositions are said to be probable, when the truth of them is neither by sense nor by other reason manifest unto us ; For that is probable, which when it can neither certainly be affirmed, nor certainly be denied, inclineth the assent unto the one part.

An improper attribution, is, in which the consequent is improperly disposed with the antecedent.

The Disposition: a
And it is either by reason of }
The Words. b

By reason of the disposition, is, when proper words being retained, the consequent is given for any inward or Essential lation or Union.

And it is either { Common,
Or Mystical,

Common, is, when an outward consequent is given to an antecedent for some vulgar and common Union or Relation : these Relations are of four sorts.

1 The Relation of the cause to the effect ; As, The Sun is said to be hot, because it causeth heat ; the Gospel is the power of God unto Salvation.

2 The Relation or Union of place, and cleaving to ; as when Iron is said to burn for the fire united unto it.

3 The Relation or representation ; as when the title of the Prince is given to his Ambassadour.

4 The Union of consent and indissoluble society ; as when the wife hath the titles and dignity of her husband, as to be called Princessse, Prophetesse, Doctoresse, &c.

Mystical, is, in which the outward consequent is given to the antecedent for mystical or holy relation.

And it is either { Typical,
Or Sacramental.

Typical, when for the certainty of the representation, that is given to the Type which belongs to the Antitype. These attributions are simple or compound.

Simple, as when that which is due to Christ onely, is given to his Type and Figure ; as of David it is said, *Psal. 16. Thou shalt not suffer thy holy One to see corruption ; Of Solomon, I will establish his house for ever, 2 Sam. 7.* These are fulfilled in Christ alone.

Compound, when partly they agree to the type, partly to the antitype, as, *thou shalt not break a bone of him, Exod. 12. Job. 19.*

Sacramental, is, in which for the Union Sacramental, and certainty of sealing up, the thing signed or propriety thereof is given to the holy sign : As, Circumcision is a Covenant, the Lamb is a Passcover, Sacrifices are expiations of sins, Bread is Christs body, Baptism is the laver of Regeneration, Bread is the Communion of Christs body, &c.

Improper

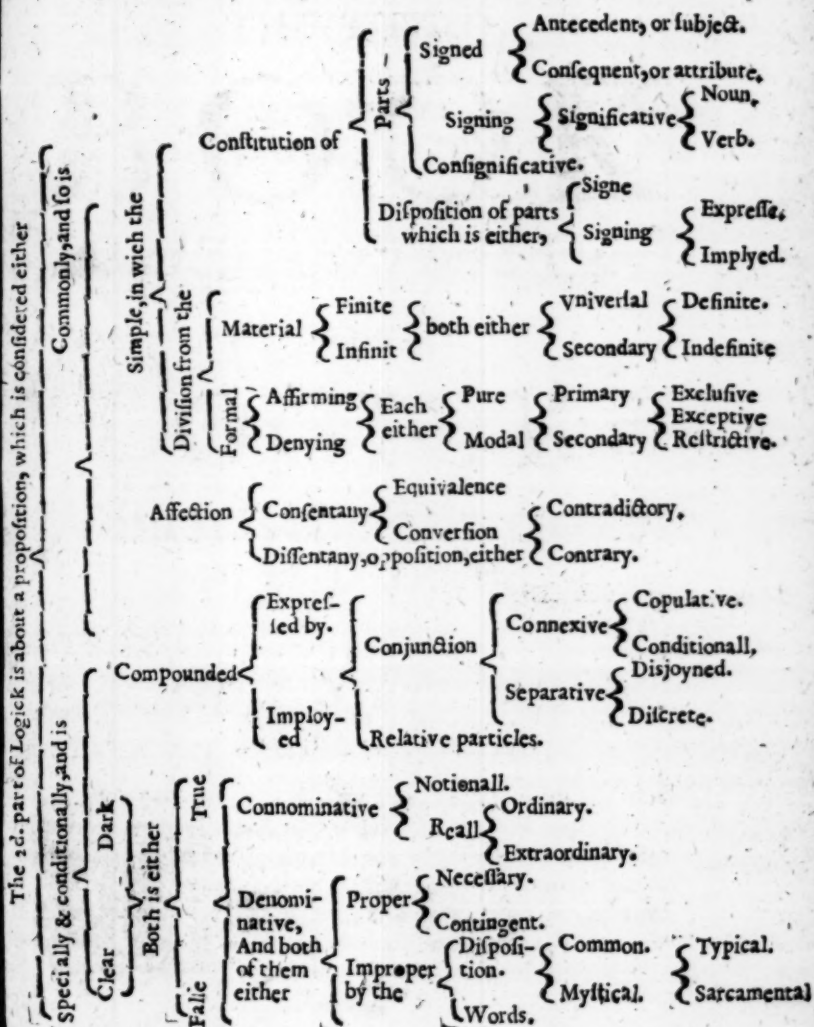
Improper by reason of the words, is, in which a word is transferred from the Native signification to some other : As when we say, The Woods do sing, The Seas clap their hands, The Fields laugh, and other figurative speeches.

A false attribution, is, which answereth not to the composition and division of things out of the mind; and it is either wholly false, or false in part; also either necessarily, or contingently false.

And thus much of the second part of Logick.

A
The first part of Logick is about a proposition, which is considered either
Compound, when parts are joined together to form a whole, or
Simple, when it is not so joined. Compound propositions are of two
kinds, viz. Copulative, and Disjunctive. Copulative propositions are
those in which the parts are joined together by a copulative particle,
as, The sun is hot, and the moon is cold. Disjunctive propositions
are those in which the parts are joined together by a disjunctive
particle, as, The sun is hot, or the moon is cold. Simple propositions
are those in which the subject is connected with the predicate by a
copulative particle, as, The sun is hot. Simple propositions are of
two kinds, viz. Affirmative, and Negative. Affirmative propositions
are those in which the subject is connected with the predicate by an
affirmative copulative particle, as, The sun is hot. Negative propositions
are those in which the subject is connected with the predicate by a
negative copulative particle, as, The sun is not cold.

A Summary View of the Second Part of *Logick*.



1. *Chrysomelidae*
 2. *Curculionidae*
 3. *Chrysomelidae*
 4. *Chrysomelidae*
 5. *Chrysomelidae*
 6. *Chrysomelidae*
 7. *Chrysomelidae*
 8. *Chrysomelidae*
 9. *Chrysomelidae*
 10. *Chrysomelidae*
 11. *Chrysomelidae*
 12. *Chrysomelidae*
 13. *Chrysomelidae*
 14. *Chrysomelidae*
 15. *Chrysomelidae*
 16. *Chrysomelidae*
 17. *Chrysomelidae*
 18. *Chrysomelidae*
 19. *Chrysomelidae*
 20. *Chrysomelidae*
 21. *Chrysomelidae*
 22. *Chrysomelidae*
 23. *Chrysomelidae*
 24. *Chrysomelidae*
 25. *Chrysomelidae*
 26. *Chrysomelidae*
 27. *Chrysomelidae*
 28. *Chrysomelidae*
 29. *Chrysomelidae*
 30. *Chrysomelidae*
 31. *Chrysomelidae*
 32. *Chrysomelidae*
 33. *Chrysomelidae*
 34. *Chrysomelidae*
 35. *Chrysomelidae*
 36. *Chrysomelidae*
 37. *Chrysomelidae*
 38. *Chrysomelidae*
 39. *Chrysomelidae*
 40. *Chrysomelidae*
 41. *Chrysomelidae*
 42. *Chrysomelidae*
 43. *Chrysomelidae*
 44. *Chrysomelidae*
 45. *Chrysomelidae*
 46. *Chrysomelidae*
 47. *Chrysomelidae*
 48. *Chrysomelidae*
 49. *Chrysomelidae*
 50. *Chrysomelidae*
 51. *Chrysomelidae*
 52. *Chrysomelidae*
 53. *Chrysomelidae*
 54. *Chrysomelidae*
 55. *Chrysomelidae*
 56. *Chrysomelidae*
 57. *Chrysomelidae*
 58. *Chrysomelidae*
 59. *Chrysomelidae*
 60. *Chrysomelidae*
 61. *Chrysomelidae*
 62. *Chrysomelidae*
 63. *Chrysomelidae*
 64. *Chrysomelidae*
 65. *Chrysomelidae*
 66. *Chrysomelidae*
 67. *Chrysomelidae*
 68. *Chrysomelidae*
 69. *Chrysomelidae*
 70. *Chrysomelidae*
 71. *Chrysomelidae*
 72. *Chrysomelidae*
 73. *Chrysomelidae*
 74. *Chrysomelidae*
 75. *Chrysomelidae*
 76. *Chrysomelidae*
 77. *Chrysomelidae*
 78. *Chrysomelidae*
 79. *Chrysomelidae*
 80. *Chrysomelidae*
 81. *Chrysomelidae*
 82. *Chrysomelidae*
 83. *Chrysomelidae*
 84. *Chrysomelidae*
 85. *Chrysomelidae*
 86. *Chrysomelidae*
 87. *Chrysomelidae*
 88. *Chrysomelidae*
 89. *Chrysomelidae*
 90. *Chrysomelidae*
 91. *Chrysomelidae*
 92. *Chrysomelidae*
 93. *Chrysomelidae*
 94. *Chrysomelidae*
 95. *Chrysomelidae*
 96. *Chrysomelidae*
 97. *Chrysomelidae*
 98. *Chrysomelidae*
 99. *Chrysomelidae*
 100. *Chrysomelidae*



THE THIRD
BOOK,
Handling the Third Part
 OF
LOGICK;
 Which is the Director of
 DISCOURSE.

Of a Syllogism.



THE third part of Logick is buſied in directing the Diſcourſe.

Diſcourſe is an act of the mind of man, moving it ſelf forward from a known thing to an unknown, by a fit collation of things former and latter.

The definition of Diſcourſe.

And it is either

{ Inferring.
 { Ordering.

K

Inferring

Inferring Discourse is an action of mans mind by certain premised propositions proving another proposition, or improving it, by help of the Precepts of a Syllogism.

Συλλόγισμος.
Composition.
ation.

A Syllogism is considered, either

Commonly, *a*
Specially, in certain conditions of matter, *b*

A Syllogism commonly considered, is either perfectly so called, or imperfectly.

A Perfect Syllogism.

Perfectly called, is, the disposition of three Propositions, wherein from the two former and better known, a third more unknown or doubtful is fitly inferred, and gathered.

In this are to be considered the

Constitution.
Division.

A Syllogism is constituted of the

Material. *m*
Formal. *n*

m

The Material, is either 1. Simple, or 2. Compound.

1. Simple are the Terms into which at last the Syllogism is resolved.

The Term is either the *utmost* or the *mean*.

The *utmost* or extreame, is that which is put both in the Conclusion and in the Premises, And it is greater, or lesser.

Major.

The greater or *Major*, is the Consequent of the Conclusion, always to be put in the first Proposition.

Minor.

The lesser or *Minor*, is the Antecedent or Subject of the Conclusion, always to be put in the second Proposition.

Mean.

The *Mean*, is, by means whereof the extreames are disposed together.

The compound matter of a Syllogism, is a Proposition.

A Proposition, is either inferring or inferred.

Inferring, is, which inferreth the Conclusion: called therefore Premises: and it is either the *major* or *minor*.

The

The *Major*, or greater, is, in which the greater extreame is disposed with the *Mean*.

The *Minor*, or lesser, is, in which the lesse extreame is disposed with the *Mean*.

The Inferred, is that which is gathered from the Premises.

The Form of a Syllogism, is the fit disposition of the *Mean* with the extreams.

The disposition of the *Mean* ariseth from the finding of it out.

The finding out of the *Mean*, consists in two things, 1. The foreknowledge of the Conclusion: 2. The Collation of the extreams one with another.

1. The foreknowledge of the \S Simple. *a*
Conclusion, is either \S Compound. *b*

Simple, is, when the nature and propriety is foreknown of both the extreams, as well the Antecedent as the Consequent.

Of this Foreknowledge there are three Canons.

1. Let the Word or Voice of both extreams be diligently examined, what it is, and of what sort; and if it be doubtful, let it be carefully distinguished, and that distinction be presupposed in place of a Principle, as well for confirmation as refutation.

2. Let it be observed, whether the extreams of the conclusion be universal or singular.

3. Let the causes, proprieties, and whole definition of both extreams be set down, either implicitey or expressey, as a certain and necessary Principle of the confirmation and refutation to come.

The Compound foreknowledge of the conclusion, is, when the nature, quality, and quantity thereof is considered.

The Canons hereof are seven:

1. Let the conclusion or state of the controversie be rightly informed.

2. Let a compound or Hypothetical, never be put in

the place of a conclusion, but only a Simple or Categorical.

3. That conclusion is more easily proved, which may be concluded in many figures and moods; And that which can be but in few, is harder to be proved.

4. An universal affirmative is hardly proved, not easily refuted.

5. An universal negative is easily proved, hardly refuted.

6. A particular affirmant is more easily proved, more hardly refuted.

7. A particular negant is easie to prove, most hard to refute.

2. Now followeth the taking of the *mean* by Collection of the extremes.

The *mean* or *medium*, is either Perfectly so called or Imperfectly.

Perfectly called, is that simple Term which being taken from the nature of both extremes, either knitteth or disjoyneth them one with another.

Hereof, are three Canons.

1. Every *mean* is taken from the Terms of both extremes in the conclusion, as well the natural, as the repugnant Terms; therefore he that would find a *medium*, must mind the general, the special, the causes, the accidents, the parts, the *cognata*, the opposites of both Terms in the conclusion.

2. What manner of *mean* is required to make a Syllogism of this or that quantity, the Vowel Letters in the Modes of every Figure, do evidently shew.

3. The *mean*, though it may be taken from the part of the antecedent as well as of the consequent, yet that is counted more noble which is drawn from the nature of the consequent; As for example, a *mean* is to be found to prove this conclusion, Every man is an *Animal*; mind the nature of this consequent *Animal*, and from it take the property of it, which is *sense*; this agreeth with both Terms, and is an excellent *mean*, or Argument to prove the conclusion, thus, Every thing that hath *sense* is an *Animal*. Every man hath *sense*; therefore every man is an *Animal*.

4. One and the same *mean* for a diverse respect of the Antecedent

Antecedent or consequent, may be referred to diverse places of Invention; as for example, A man hath sense, because he is an Animal: This Argument in respect of the Antecedent *man*, is from the place of the genus; but in respect of the consequent, it is from the place of the subject; for an Animal is the proper subject of sense.

5. Store of Means or Arguments is gotten chiefly two ways: 1. By deducing both extrems one after another through the places of invention, as well contingent as necessary. 2. By discerning the principal means from the less principal; for example, take the consequent of thy opposed conclusion particularly, and lead it through the contingent places; argue and reason from the Notation of it, the likes, equals, conjugates, and the other contingent titles of places: which are at least 16. now thou hast so many Means. Then come to the others store-house of necessary places; and reason from the Genus, the difference, the subject and accident, the proper, the causes, and the other titles of necessary places, which are at least 17. Then do the like about the Antecedent of the proposed conclusion; and thus maist thou have for one Conclusion fifty Means or Arguments: but not the store of Arguments is to be respected so much as the weight or force of them; three or four found Arguments are enough to prove any common Conclusion.

The Mean imperfectly so called, is when a Testimony, or speech of any Author is taken to prove the conclusion. This mean is called *ἄτεχον* inartificial, because testimonies want artificial force to prove any thing of themselves. It is called also *the Place from authority*, that is, the dignity of the speaker.

And thus much of the constitution of a Syllogism; Now followeth the division of it.

Of the three Figures of Syllogisms,

A Syllogism is divided by three Figures.

A Figure is the conformation of a Syllogism, according to the certain situation of the Mean term, and certain manners (or modes) of quantity and quality; *Figura est conformatio ὅμο προτάσεων ἢ καὶ μέσων ὅρων. Alexand.*

A mode or manner, is a lawful constitution of Propositions in every figure, according to the quality and quantity.

And it is either $\left\{ \begin{array}{l} \text{Principal.} \\ \text{Lesse Principal.} \end{array} \right.$

Principal, is, when the Propositions are general, that is, joyned with universals, or indefinite, or particular.
Lesse Principal, is, when the premises are singular.

The Figures of Syllogisms are three:

The first Figure, is, in which the mean or middle Term is the Antecedent (subject or foregoer) in the *major* or first proposition: and the consequent (Attribute or follower) in the *minor* or second Proposition.

The Modes of this Figure are four, called *Barbara*, *Celarent*, *Darii*, *Ferio*; these are but words of Art, and serve for no other meaning then that the vowel Letters in them denote the quality and quantity of the Propositions; *a* noteth an universal affirmative; *e* an universal negative. *i* Noteth a particular affirmative, and *o* noteth a particular negative.

As may be seen in the examples following.

Bar- Every sinner is subject to Gods wrath.

ba- Every man is a sinner: therefore,

va. Every man is subject to Gods wrath.

Ce- No sinner deserveth Gods favour.

la- Every man is a sinner: therefore,

rent. No man deserveth Gods favour.

Da- All sin is to be shunned.

vi- Some pleasure is sin: therefore,

i. Some pleasure is to be shunned.

- Fe.* No sin giveth a man true comfort:
ri- Some pleasure is sin : therefore,
o. Some pleasure giveth a man no true comfort.

A Singular Syllogism.

The promised *Messias* ought to die for the sins of the world.
 Jesus Christ is the promised *Messiah* : Therefore,
 He ought to die for the sins of the world.

The second Figure, is, in which the Mean or middle term is in both the Premises, put in the place of the Consequent.

The Modes of this Figure are also four, Called, *Cesare*, *Ca-*
mestres, *Festino*, *Baroco*.

- ce-* No true Christian loveth this worlds good:
sa- Every covetous man loveth this worlds good: therefore,
re. No covetous man is a true Christian.

- ca-* All righteousness pleaseth God.
me- No faith without works pleaseth God : therefore,
stres. No faith without works is righteousness.

- Fe-* No true Worship displeaseth God:
fi- Some prayer displeaseth God : therefore,
no. Some prayer is not true worship.

- Ea=* All vertue deserveth praise :
ro= Some love deserveth not praise : therefore,
co. Some love is not vertue.

Singular Syllogisms.

Jupiter Belus was an *Assyrian*.
Jupiter of the Poets was not an *Assyrian* : therefore,
Jupiter of the Poets, is not *Jupiter Belus*.

Jude Iscariot was a Traytor.
Jude that wrote the Epistle, was not a Traytor: therefore,
Jude that wrote the Epistle, was not *Jude Iscariot*.

3. *Figure.* The third Figure is, in which the *Mean* or *Medium* is put in the place of the Antecedent in both premises,

The Modes of this Figure are six.

Called, *Darapti*, *Felapton*, *Disamis*, *Datifi*, *Bocardo*, *Ferison*.

Da= Every godly man is happy.

rap= Every godly man is hated of the world ; therefore,

ti. Some that is hated of the world is happy.

Fe= No will worship pleaseth God.

lab= All will-worship is the invention of man: therefore,

ton. Some invention of man pleaseth not God.

Di= Some man shall be saved,

fa= Every man is a sinner : therefore,

mis. Some sinner shall be saved.

Da= Every holy man is loved of God.

ti= Some ho'y man is afflicted of God : therefore,

fi. Some that is afflicted of God, is loved of God.

Bo= Some in the visible Church shall not be saved.

car= All in the visible Church profess Christ : therefore,

do. Some that profess Christ shall not be saved.

Fe= None whom God loveth are wretched.

vi= Some whom God loveth are poor : therefore,

son. Some poor men are not wretched,

Singular Syllogisms:

Judas was not saved.

Judas was an Apostle ; therefore,

Some Apostle was not saved.

Abraham entered into the Kingdom of Heaven.

Abraham was rich : therefore,

Some rich man entereth into the Kingdom of Heaven.

And

And thus much of the Species or Figures of a perfect Syllogism.

Now followeth the proprieties.

Of the Proprieties of a Syllogism.

The Proprieties of a Syllogism are either $\left\{ \begin{array}{l} \text{General.} \\ \text{Special.} \end{array} \right.$

General, are which agree to all the Figures together.

And they are comprehended in these Canons.

1. The disposition of a Syllogism is called by the principles set in the mind of man, of which the first is that which is called *Spoken of All, and of None*; to wit, when any thing is said or denyed of the Universal, the same is also said or denyed of the particulars contained under it.

The other Principle is of proportion.

Whatsoever do agree in one third Term, do agree between themselves; and they that disagree in one third, disagree between themselves.

2. In a Syllogism three Terms are only disposed, not more, nor fewer: The fourth Term must needs trouble the frame: For the *mean* is referred unto two: And four Terms may either be expressed, or implied in a doubtful word; For every doubtful word, is a double word. Neither can there be lesse then three Terms; For two extreame cannot be disposed and knit without a third *mean*; Not but that one Term repeated more effectually may stand for two Terms; as in this *A man in extreame poverty is yet a man.*

3. The *mean* (or middle Term) may not come into the conclusion.

4. If Abstract Terms be confounded with Concrete: and Oblique cases, with Right; so as the Principle of the *Spoken of all, Of none*, be violated, or that there be four Terms, the Syllogism must needs be naught.

5. Let there be a right placing of consignificative, or exceptive, and restrictive words, lest that which pertains

to the conclusion be plucked from it, or lest the particular restrictive be twice repeated in the premises; For if that be, it is meer trifling; As in this example, *Good, as it is good, is lovely*; Justice is good, as it is good, *Ergo, &c.*

6. A Syllogism consisting of meer particulars is naught. One Term must be universal, else 'tis against both those Syllogistical principles noted before in the first Canon of All, and of None, *and agreeing in one third*; Moreover in pure particulars there be four Terms; For the Major speaks of one subject, and the Minor of another; As *Some man is rich, some man is learned*, Therefore learned men are rich.

7. A Syllogism of meere Negatives is naught: For it is against the second Syllogistical principle, which will have the middle Term at least attributed to the one extremum. Example, *No Infidel pleaseth God; No Elect is an Infidel*; Therefore, *No Elect pleaseth God*.

8. Let the Premises in a Syllogism have the same kind of Attribution, or Predication; that is, the *major* must not be proper, and the *minor* improper, or otherwise. As, *Bread is eaten with the mouth; Bread is Christs body*; Therefore, *Christs body is eaten with the mouth*: Here that which is attributed or spoken of the *Bread*, in the first proposition, is proper; in the 2^d. figurative: the conclusion therefore is false.

9. The *major* and *minor* Term, must be brought into the conclusion, as they were disposed in the Premises, not changed or maimed; Therefore it is not right to say; *All sinners repentant find mercy; Some men find not mercy*; Therefore, *some men are not sinners*: Here the conclusion is maimed, and is not as in the first proposition.

10. There must be no more in the conclusion then was in the premises.

11. The conclusion must imitate the more unworthy and weaker part that is premised: The worthiness is esteemed by the quality, and quantity; so that an Affirmative is always more worthy then a Negative, and an Universal then a Particular. It is therefore ill to reason thus; *Some faithful are saved; Every faithful man is called*; Therefore, *every man that is called is saved*. Here, of a particular *Major* is inferred a general conclusion; And it followeth not the weaker, but the stronger.

12. In a Syllogism, sometime by reason of the form, a true conclusion is gathered from false premises: But it is impos-

impossible for a false Conclusion to be gathered from true premises: Truth cannot be gathered from falshood, but by accident; as, Every man is a Living creature: Every man is a stone: therefore, Every man is a living creature: Here the conclusion is true, (by reason of the form) though both the premises be false.

13. Of one Syllogism rightly framed, many conclusions may be gathered. And this, four manner of ways.

1. By consequence; As, They that have communion with the Devil abide not in Christ, and consequently do not eat Christs body.

2. By conversion of propositions; As, No elect abideth in sin all his life; Every believer is an elect; Therefore, none that abideth in sin all his life, is a Believer.

3. By inclusion of one proposition in another; As, All the Elect believe in Christ; Some men believe not in Christ; Therefore some men are not Elect; Therefore also it is false that all men are Elect; For in proving the truth of the one part of the contradictory, the falshood of the other part is included and proved.

4. By descention, or undertaking a particular term under an Universal; As, All that conserveth society, is profitable; All vertue conserveth society; Therefore, all Vertue is profitable, Therefore every lawful contract (because it conserveth society) is profitable.

And thus much of the general properties, common to all the Figures. Now followeth the special.

Of these some pertain to the $\left\{ \begin{array}{l} \text{Primary.} \\ \text{Secondary,} \end{array} \right\}$ Figure.

The properties of the primary Figure, are five, contained in so many Canons

1. The disposition (or frame) of the first Figure, is most perfect: And this for three causes.

1. Because the frame of this Figure most agreeth to natural sense, and the Syllogistical principles that are in all men, and is of all the most evident.

2. Because the Mean of this Figure, is indeed the Mean or middle in place and situation; whereas in other figures, it is the Mean *ὁμωσύμως*, and by reason of illation.

3. Be-

3. Because in this, all kind of conclusion may be gathered; Affirmative, Negative, Universal, and Particulars, which is done in none of the other Figures.

2. In the first figure there is a proceeding from Universals to Particulars, or from the Genus to the Species.

3. The *major* of the first Figure must alwaies be Universal.

4. The *minor* must alwaies be Affirmative.

5. The Antecedent of the *minor* proposition in the first figure, must be included in the Antecedent of the *Major*, as the Special in his General. This Canon is most profitable to be noted: For the whole frame, and form of this first figure is overthrown, if in the Antecedents of the *major*, and *minor* be two disjoyned things, and not subordinate one to another.

The properties of the secondary figures, are either common to both, as well the second as the third, or special to each one.

Common to both, is imperfection arising both from lesser evidence, and from placing of the *mean* with the extremes,

Imperfection requireth both $\left\{ \begin{array}{l} \text{Reduction,} \\ \text{and} \\ \text{Exposition.} \end{array} \right.$

Reduction, is the transforming of a Syllogism formed in the first or second Figure, into a Syllogism of the first Figure.

Reduction is either $\left\{ \begin{array}{l} \text{Direct,} \\ \text{or} \\ \text{Indirect.} \end{array} \right.$

1. Direct, is, which is done by the only transposing, or turning of the Propositions, the extremes of the conclusion remaining.

The Canons of this Reduction are eight.

1. Reduction of the second and third Figure unto the first, is not alwaies necessary; therefore not always carefully to be essayed.

2. The Consonants in the beginning and the midst, do shew the manner of Reduction,

3. The

3. The Consonants in the beginning are four; *B C D F*, shewing unto which Mode of the figure, every Mode of the second and third figure is to be reduced; Namely to that which beginneth with the same Consonant. As *Cesare* and *Camestres* are reduced to *Celarent*; *Festino* and *Felapton* unto *Ferio*; *Disamis* and *Datisi* unto *Darii*.

4. Also the four Consonants in the midst, *C M P S*, do shew by what Instrument the reduction is to be made, whether by Conversion, Transposition, or deduction unto impossible.

5. *C*, therefore noteth indirect Reduction, or that which is done by the Impossible, and is onely in those words, *Baroco* and *Bocardo*.

6. *M*, noteth that there must be a transposition made of the propositions, the Minor in the place of the Major, and the Major in place of the Minor.

7. *P*, noteth conversion of the proposition by accident: to wit of the *minor*, into which the syllable having *P*, falleth, if the syllable of the modes be rightly distributed into the propositions.

8. *S*, sheweth that there must be a simple conversion made either of the Major, or the Minor, and the conclusion together: as this letter is hard, either in the first, or middle, or last syllable: For if it be heard in the first syllable, As *Cesare*, it noteth the simple conversion of the major; if in the midst, it notes the conversion of the minor: And if in the last, the conversion of the conclusion, as in *Camestres* it is twice heard, in the midst and the last, and therefore noteth the conversion to be made of the Minor and of the conclusion. As take the syllogism in *Cesare*.

Ce = No true Christian loveth the World,
sa = Every covetous man loveth the World: therefore
re. No covetous man is a true Christian.

First the letter *C* sheweth it must be reduced to *Celarent*; *S*, in the first syllable shews the manner of reduction; to wit, by a simple conversion of the major, thus,

Ce- None that loveth the world is a true Christian.
la. Every covetous man loveth the world: therefore,
rent No covetous man is a true Christian.

Indirect

Indirect Reduction, is, when we shew the evidence of the Illation by absurdity of the contradiction to be admitted.

The Canons hereof are six.

1. Indirect Reduction hath place only in two Moods *Bareoco* of the second, and *Bocardo* of the third Figure.

2. Indirect Reduction is made by concession, and by Assumption.

3. By concession, because the adversary granteth both premises, and yet denies the inference of the Conclusion.

4. The premises therefore, being granted, by supposition, the contradictory is to be taken of the conclusion; which is in the imperfect Syllogism, that is to be reduced.

5. The contradictory of the conclusion being taken, is put in the place of the *Minor*, if it be *Bareoco* of the second Figure: and in place of the *Major*, if it be *Bocardo* of the third Figure: and so the *Major* in the second Figure, is always left in his place, as the *Minor* in the third.

6. Hence is made the conclusion in the first Figure, wherein contradiction is made to the proposition left of the imperfect Syllogism; and so the adversary is driven to an absurdity, that is, to the contradictory of that proposition, which before he had granted as true.

And thus much of shewing the evidence by Reduction.

Expositio.

Exposition, is the declaration of a Syllogism formed with a middle Mean general Term in the third Figure, by a singular Mean contained under the general, as nearer to the sense; for example,

None of the Elect sin unto death.

Some of the elect sin grievously,

Therefore, Some that sin grievously, sin not to death.

Exposition of this may be made by singulars known unto us, as *David*, *Peter*, &c. *David* sinned not unto death; *David* sinned grievously; therefore, some grievously sinning, sin not to death.

The Properties peculiar to the second Figure now follow, which are comprehended in three Canons.

1. The second Figure is (*ἀνασκευαστική*) most fit to refute with; for it disjoyneth two diverse things, because they agree not in one third.

2. In the second Figure the *Major* must alway be Universal, even as in the first Figure.

3 In the second Figure, may be no meer affirmants.

The Proprieties of the third Figure, are four, set down in four Canons.

1. The proceeding of the third Figure is, for the most part, from the straighter to the larger. Therefore *Logicians* say, the first figure hath process *κατὰ σύνθεσιν*: the third, *κατὰ ἀνάλυσιν*.

2. The *Minor* must always be affirmant.

3. The whole and entire consequent of the *Minor* must needs be inferred in the conclusion, and put in the place of the Antecedent; for if it be maimed, or in part, all is troubled, and there are four Terms. As, *whole Christ is every where*; whole *Christ* consisteth of the Godhead and the Manhood; therefore the Manhood is every where: Yea, though the Matter be good, the Form may be evil; as, *God is the God of the living*; God is the God of *Abraham*: therefore, *Abraham liveth*. Here, in the Conclusion, the Consequent of the *Minor* is impaired; which whole is not *Abraham*, but the God of *Abraham*. The Argument then must not be in the third, but the first Figure; thus, *They, of whom God is God, do live*; but God yet, is the God of *Abraham*; therefore he liveth: the *Major* followeth, because to be God, is to exercise Divine properties in the Object; and in whom such things are done, he must needs exist.

4. The Conclusion in the third Figure, is never Universal. And hitherto, of a perfect Syllogism.

Imperfect
Syllogism,

An imperfect Syllogism, is, which hath an imperfect disposition of Syllogistical Form.

And it is } Direct. *f*
 } Indirect. *g*

g Indirect, is which concludeth by indirect or absurd.

And it is } Primary. *a*
 } Secondary. *b*

a Primary, is, when the adversary by the contradictory of the conclusion which he denyeth, and by the complication of a proposition manifestly true and granted, is driven to an absurdity.

The Canons hereof are seven;

1. Let the contradictory be taken of the conclusion which the adversary denyeth.
2. Let a contradiction be assumed manifestly true, and which the adversary cannot deny; and let that be placed instead of the *Major*.
3. Let the contradictory of the conclusion be put instead of the *Minor*; and thereupon with the *Major* manifestly true, let be inferred an absurd conclusion.
4. From the absurd conclusion inferred, go back to the absurd proposition, or contradictory of the first conclusion.
5. The falshood of the *Minor* being shewed by the force of the contradictory principle, let it be shewed that the first conclusion is true, as, that whereto the *Minor* is contradictorily opposed; for example, *Arians* deny this conclusion, *The Holy Ghost is God*. I take the contradictory, *The Holy Ghost is not God, but a Creature*; and thus I infer, *The spirit of God is not God, but a Creature*; therefore, the *The spirit of God is without God*. This Conclusion is absurd; for no spirit is without that whose spirit it is: therefore *Paul* saith plainly, *The spirit of God is in God*. Therefore either the *Major* or *Minor* is absurd; not the *Major*, for it is manifest, the

the creatures are without the Creator; therefore the Minor : And therefore the right conclusion is true, which is opposed to this Minor.

6 Therefore a Syllogism leading to absurdity, is faulty either when the Major is infirm, or the conclusion not absurd or opposed to a true conclusion.

7 A Syllogism leading to absurdity, much useth in disputing, and hath the chief use in shewing the verity of principles, and specially of those conclusions which are nigh to principles, so as they cannot well be proved by demonstration.

Secondary, is, which by the Adversaries grant of contradictories, inferreth the denyall of the same by it self; as, No Naturall body is infinite; some body, viz. *Christ*, by the Ubiquitaries opinion is infinite: therefore some body, viz. *Christ*, is not a body.

A direct, imperfect Syllogism, is, 1 *Enthymema*. 2 Consecution of sentences. 3 Induction. 4 *Sorites*

1 An *Enthymema* is a Syllogism wherein one of the premises is kept in.

The Canons are three.

1 In an *Enthymema*, the first proposition is called the antecedent, the other the consequent.

2 It may easily be made a Syllogism by adding the proposition that wanteth.

3 Which of the premises is wanting, may easily be judged by the conclusion; whereof, if the attribute (or latter part) appear not in the antecedent; the Major is wanting; if the subject (or first part) appear not, the Minor is wanting; as, *a living creature moveth*; therefore *man moveth*. Here wants the Minor; for this word *man* appeareth not in the antecedent. *A man is a living creature*; therefore *he moveth*; Here wants the Major; for the attribute in the conclusion, *moveth*, appeareth not in the antecedent.

Consecution of sentences, is, when without disposition of the Mean, one sentence followeth another.

And it is $\left\{ \begin{array}{l} \text{Consentanie. } a \\ \text{Dissentanie. } b \end{array} \right.$

a Consentanie, is, when the consecution proceedeth by consent of the sentences ; Namely by conversion , inclusion , and other naturall Relations of the Sentences.

The Canons hereof are nine.

1 The converting to the converted, in all kinds of conversion, followeth rightly: as, No Infidel eats Christs body ; therefore, None that eats Christs body is an Infidel.

2 That inference which is made from a contrary sense is neer kin to conversion by contrary placing : as, Vertue is to be praised , therefore, Vice is to be dispraised.

3 From the Superiour or Universall unto the Inferior or Particular distributely there is a good consecution : as, *All sinners repenting finde mercy* : Therefore all great sinners repenting do finde mercy. But from one particular to another, it followeth not rightly ; As to say : Some sin is not forgiven in the life to come , therefore some sin is forgiven in the life to come.

4 From the affirmative of a finite consequent (or attribute) followeth the Negative of an infinite consequent : as man is just, therefore man is not not-just.

5 From the affirmative of an infinite consequent followeth the Negative of a finite consequent, if the antecedent be capable of the habit : as, Man is not just, therefore neither is he just, neither unjust. But of an infant it followes not, he is not just, therefore he is unjust ; for he is not capable.

6 From a conjoyned consequent are inferred things divided, where there is no ambiguity nor repugnancy in the adject : as, Man is a living sensible body ; Therefore man is a body, man is living, man is sensible. But it follows not, a Carcase is a dead man, therefore it is a man; For between a Carcase and a man there is a repugnancy.

7 From two or mo disjoyned consequents that cleave together by themselves, and are taken without ambiguity, we may infer conjoyned things : as, Man is a body, and he is mixt, and he is living, and he is sensible ; therefore, man is

is a living mixt sensible body. But it followeth not if one say; This man is a Musitian, and he is good, therefore he is a good Musitian; because Musitian and good, cleave together by accident; And there is ambiguity in the word *good*, which may be understood either of Moral good, or of perfection of Arts. Neither is this right to say; This servant is a *father*, and he is thine; therefore, he is thy *father*; For there is ambiguity in the word *thine*.

8 From an exclusive to an Universal of transposed terms, is a good consequence. As, Only man can laugh: therefore whatsoever can laugh is a man.

9 From the removing of the one immediate member, unto the exclusive, is a good consequence: As, We are not justified by works: therefore by faith only.

Dissentany consecution, is, when from the truth of the one of the opposites is understood the falshood of the other; and contrary from the falshood of the one, the truth of the other. As, It is true that some man is not chosen to life: therefore, It is false that every man is chosen to life. It is true that every Christian man is to be baptized: therefore, it is false that no Christian Infant is to be baptized.

Induction is either { Principal. *a*
Lesse principal. *b*

Principal, is, when from many singulars, or particulars, there is drawn a general conclusion.

The Canons hereof are three.

1 An Induction standing of particular propositions, may bring in all the particulars: As if one would prove that Wine heateth, he may reckon up all sorts of Wine in the World, as *French, Spanish, Rhenish, European, Asian, African Wine, &c.*

2 When singulars are infinite, it is enough to alledge some chief, with addition of this clause, *Neither can an unlike example be shewn*: As Paul in *Heb. 11.* to prove that all that are saved, are not saved but by faith, alledgeth *Abel, Enock, Noah, Abraham, Isaac, Jacob, Joseph, &c.* and at last *faith,*

saith, There are many more examples; Neither can any be shewed unlike to those.

3 An Induction may be made a Syllogism of the first Figure, by putting in the place of the Major such a proposition in which the consequent of the conclusion is spoken of all particulars or singulars (reckoned up or understood) as of the mean; and adding a Minor, in which the same particulars or singulars are spoken of the Antecedent (or first part) of the conclusion. As, *Spanish, French, Rhemish*, and all Wines do heat. All Wine is *Spanish, French, Rhemish, &c.* therefore, all Wines do heat.

b Lesse Principal Induction, is, when one or two singulars are induced, or when one is proved by another: As, *Abraham* was justified by faith: therefore, other godly are so justified also.

Sorites is an imperfect Syllogism, wherein the consequent of the first proposition is made the Antecedent of the second; and so forward as by a chain, until at length the last consequent be spoken of the Antecedent of the first proposition: *Cæcis* an heap, *Cæcis* a cooperator, an heaper together. This is called a Stoical argument.

The Canons are five.

1 The reason of the consequence in a Sorites is both the connexion of the subordinates in the same predicament, and also the coherence of the causes and effects by themselves.

For Example. A man is an animal, an animal is a sensual body, a sensuall body is living, that that is living is mixt, that that is mixt is a substance: therefore, a man is a substance; also, *Rom. 8.* All foreknown are predestinate, all predestinate are called, all called are justified, all justified are glorified: therefore, all foreknown are glorified.

2 When terms not subordinate are confounded, and causes by themselves are mixt with causes by accident, the Sorites is naught: as, Of evil manners spring good Laws, good Laws are worthy of praise, things worthy of praise are to be desired: therefore, Evil manners are to be desired. This conclusion is naught; for evil manners are not causes of themselves of good Lawes, but by accident.

3 A denial makes a faulty Sorites, when it cannot be reduced

duced to some figure; and begetteth either both premises negant, or a negant Minor in the first figure: otherwise when there is a good connexion of negative consequents or attribures, Negative Sorites are not simply to be rejected; as, Affliction bringeth patience, patience bringeth experience, experience brings forth hope, hope makes not ashamed, therefore affliction makes not ashamed.

4 When a particular proposition in a Sorites is put in the second or third place, or when the particular negant is put in any place, the Sorites is naught; for the Major is particular, or the Minor negant in the first Figure.

5 In a Sorites, the Antecedent or first part of the conclusion is the Minor term, the consequent the Major; the other which besides these are found in a Sorites, are Means; and look how many Means, so many Syllogisms.

An imperfect Syllogism } Simple.
also, is either } Compound.

*A compound or
hypothetical
Syllogism.*

Simple, which consisteth of simple Propositions; of which we have heard before.

Compound, is, which consisteth of a compound Proposition, called also hypothetical, and $\chi\tau\iota\mu\epsilon\tau\acute{\alpha}\lambda\eta\iota\upsilon\upsilon$.

And it is either } 1 Conditional.
 } 2 Disjunctive.

Conditional, whose Major is Conditional or Hypothetical.

The Canons hereof are seven.

1 An Hypothetical Syllogism, consists of antecedent and consequent: the antecedent is of the first part of the Proposition; the consequent of the latter.

2 The Union of antecedent and consequent, is called the reason of the consequent, which is the very form of an hypothetical Syllogism; and therefore if it cannot be granted, the hypothetical Syllogism must needs be faulty.

3 That Hypothetical Syllogism is good, which may be reduced to a good simple Syllogism; for as the perfect is al-

ways the measure of the imperfect, so a simple Syllogism is the measure of a compound.

4 Therefore in an Hypothetical Syllogism, from the assumption of the antecedent to the conclusion of the consequent, the inference is of force, but not from the assumption or putting of the consequent, to the putting of the antecedent; for so in the second figure should be meer affirmants; as, If Infidels be grafted into *Christ*, they eat his flesh: But they eat his flesh; therefore they are grafted into *Christ*. The Argument is not of force.

5 From removing the consequent to the removing of the antecedent, the inference is of force; but not from the destruction of the antecedent to the destruction of the consequent; for so there should be a minor negant in the first figure: as, If he be a man, he hath reason; but he is not a man: therefore he hath not reason. The Conclusion is true, but it followeth not of the premisses formally, but by accident only.

6 When an Hypothetical hath three terms in the first Proposition, it is easily reduced to a Categorical (or simple) Syllogism; for the reason of the consequence being granted, is put for the Major in a simple Syllogism, and then the Minor followeth of its own accord; as, If the Heaven be hot, it may be corrupted by another body: the reason of the consequence is, Every hot thing may be corrupted with another body that is cold; but it is not corruptible; therefore neither is it hot. Hereof make a simple Syllogism in the second figure, thus. Every hot thing is corruptible: Heaven is not corruptible: therefore Heaven is not hot.

7 But when four terms are in the first Proposition, the reduction is hard and laborious, because the reason of the consequence cannot so easily be rendered by a simple Proposition: as, If Justice be by the Law, *Christ* died in vain; But *Christ* died not in vain: therefore Justice is not by the Law. Here are four terms in the first Proposition.

2 A Disjunctive Syllogism is, which hath the first Proposition a Disjunctive.

And it is either { Uniform. *c*
Biformed, or a Dilemma. *d*

Uniform, is, which of members disjoyned takes away the one to put the other, or puts the one to take away the other. as, Either we are justified by faith, or by works : not by works ; therefore by Faith.

The Canons hereof are two.

1 The whole force of the consequence in a disjoyned Syllogism, consists in the opposition and disjunction of the parts, whereupon that must needs be naught whole parts are subordinate : as, We have instruction either from God, or from our teachers ; but it is from God ; therefore not from our teachers. The disjunction is naught, for it disjoyneth things subordinate.

2 A right disjunction, requires a full enumeration of parts : if therefore a third part can be given, or a fourth, the disjunction is naught : as, Heaven is either *Hot* or *Cold* : but it is not cold ; therefore it is hot,

Here the first proposition hath an imperfect enumeration ; for we should adde, or else it is without all Elementary quality.

A Biformed disjunctive is, that when a disjunction of parts is made, which soever be granted, the adversary is fast : it is called a Dilemma *διλημμα*, as it were *δις λαμβανόμενον*, twice taken and taking ; also an *Horned* Syllogism, and a *Crocodile* Syllogism. As, *Johns* Baptism is either of God or of men. If of God, why do we not receive it ? If of men, we are in danger of the people which count him a Prophet.

The Canons hereof are four.

1 The force of consequence in a Dilemma dependeth on the full enumeration of the disjoyned members, and the convenient removing of them both.

2 The Dilemma hath no force, if there be not a full disjunction, but a third or fourth member may be given.

3 It is also without force if both members be granted, as making nothing against us. As the *Jews* reasoned against *Christ*: *Tribute must be given to Cesar, as unto God; If to God, then not to Cesar, and this is Treason: If to Cesar, then not to God, and this is Sacrilege.* Our Saviour answereth by granting both, *Give to Cesar that which is Cæsars, and to God that which is Gods.*

4 Finally, A Dilemma hath no force if it may be turned and returned upon the adversary.

Often also in the undertaking of a Dilemma, they are faulty in evil consequence, and then we must answer by denying the consequence, as, Infants which while they are a Baptizing, do cry and resist, either they understand, or not: If they understand not, neither beleeve they; and therefore should not be baptized: If they understand, they are Sacrilegious that oppugne Gods Institution.

Here be evil consequences in both branches; for it followeth not, That Infants do beleeve, although they understand not explicitey what there is done. Neither followeth it, That they are Sacrilegious and repugne Gods Ordinance though they cry and struggle; for they struggle not against the water as it is an holy sign, or with formal *Water*; but as it is a cold Element offensive to their tender body. Even as a godly man that loves no wine, doth naturally abhor the wine which is in the Lords Supper; but he abhors it only as it is wine, and not as it is a Sacred signe of Christs blood.

And thus much of a Syllogism Formal, or commonly considered.

A Special or Material Syllogism, is, which is restrained unto certain conditions of matter.

And it is either $\left\{ \begin{array}{l} \text{True.} \\ \text{Apparent.} \end{array} \right.$

True, is, when not only the form, but also the matter of it is good.

And is either $\left\{ \begin{array}{l} \text{Notional. a} \\ \text{Real. b} \end{array} \right.$

A notionall Syllogism, is, whose conclusion and premises have some second Notion or term of Logick.

The Canons hereof are two.

Of which the first is for foreknowledge of the conclusion.

The latter is for finding out of the mean.

1. Every simple Notion handled in the first part of Logick comes into the conclusion of a Notional Syllogism; for every second Notion may be compared with the first. We ask, Whether *time* and *place* be words conjoynd or absolute? Whether the Genus of sin be an action, or the Genus of faith be knowledge? Whether *Antichrist* is to be one singular person? Whether faith be proper to the Elect? Whether persons in the Trinity be really, modally, or formally distinguished, and so of all other points. So as there is great use of a Notional Syllogism.

2. The Mean term for a notional Syllogism, is easily taken from the nature and properties of that second Notion, of which question is made in the conclusion; so as from the first part of Logick the Canons of every second Notion may be put for the Major in the Syllogism, and then let the assumption be made affirmative or negative.

For example. It is asked, Whether an action be the genus of sin, or not. For a denial, there is found out a mean term, from the nature and properties of a good genus. As by this Canon. No subject is the genus of that whereof it is the subject. l. 4. *Top. cap. 6.* But an action is the subject whereto sin cleaveth; therefore it is not the genus of sin.

Again, It is asked, Whether good works be the cause of Justification. Take for Major this Canon of a cause; No cause is after the effect; but good works are after Justification; for the person must first be justified and please God before he can do any good work: therefore good works are not the cause. And so of all other Notions, with their Canons treated of in the first part of Logick, whereby appeareth the great use of those Rules: and that there needs here no long discourse of a Notional or topical Syllogism.

A Comparative Syllogism.

Seeing every Syllogism is first absolute; As when we ask whether this be that or not: or else secondly Comparative, as when we ask whether this be more or lesse then that; here shall be added Canons of a Comparative Syllogism.

The generall Canons hereof are two.

- The 1 For the foreknowledge of the conclusion.
2 The other to finde the Mean.

1 The conclusion of a Comparative Syllogism being contingent, and for the most part taken confusedly, needeth therefore diligent distinction and limitation: As it one ask, whether this or that be better; We must distinguish between better simply and absolutely, *ἀπλῶς ἀγαθὸν καὶ βέλτιον*, and better in respect, and after a sort, *ἀγαθὸν καὶ τὶ καὶ τινι*, and *αἰρετώτερον*, rather to be chosen in respect of time and place: So marriage is simply better than a single life, because of propagation, *Gen. 2.* Yet single life is rather to be chosen in time of persecution, *1 Cor. 7.*

2 The mean term of a comparative Syllogism, is hardly found by the places of reall invention; because the attribute is most common, and almost Notional, not reall; therefore this is here handled after a Notional Syllogism.

The speciall Canons pertain either to the question as it is asked indefinitely, whether this be rather then that? or unto the question as it is asked, whether this be better then that, or worse?

1 That which is such by Nature, is rather such then that which is not such by Nature; as, flowers are fairer then garments; For, they have a naturall beauty, these but an artificiall.

2 That which maketh an other such, is rather such then that which maketh not; and if both do make, that which rather maketh, is rather such; As Fire is hotter then Water; for it maketh the Water such.

The Canons pertaining to a conclusion, better or not better, are these.

1 That which is more lasting and constant, is better than that which is lesse lasting; So 1 Cor. 13. Love is better than faith; For love endureth alwayes.

2 That which is of it self good, is better than that which is good by another, and by accident; So, To live is better than to eat, because we eat to live, and live not to eat.

3 Simply good, is better than that which is good for some; As marriage is better than single life; Study of learning better than Merchandize.

4 That is more excellent which is in the more worthy and honourable thing; As a Monarchy is the best Regiment; For God is a Monarch. It is better to give, than to receive; For God giveth onely.

5 The end is better than the means unto the end; As better is health than the use of Physick; better is peace than Triumph.

6 That which is possible, is better than that which is impossible.

7 That is better which of it self is more fair and honourable.

8 That which is after, is oftentimes better than the former; to wit, if other things be like, &c. As, the later thoughts are better than the former.

9 Many good things are to be preferred before few.

10 That which effecteth many good things, is better than that which doth but few; So a Publike person is better than a Private.

11 That which is joyned with pleasure, is better than that which wanteth pleasure.

12 At what time a thing is more necessary, at that time it is more to be chosen; So comfort is better in sorrow than in prosperity.

13 That which is alwayes profitable, is better than that which is but sometime; So, Bread is better then all Pheasants, Partridges, &c. For it is alwayes needfull.

14 That which hath all kindes of good, as honest, profitable, and pleasant, is better than that which is under but one kinde of good.

15 That

15 That is most to be shunned, which most hindereth things to be chosen.

16 They are most to be chosen, whose opposites are most to be shunned: So prudence is better than knowledge, because imprudence is more hurtfull than simple ignorance.

17 That is best which is most famous and notable.

18 Hard things are to be preferred before easie.

19 Things that we may communicate with others, specially with friends, are better than those which we may not; So learning is better than health, liberality than temperance.

20 That is best which is most proper; So Gods grace is better for his children, than worldly riches; For *these* are common with the wicked, *that* proper to the elect; To use reason, is better than to use sense; For that is proper to man, this is common with beasts. So wit is better than memory, which many fools have.

21 Of those which are under the same Genus or Species, that is better which hath its own proper vertue; So cold water is better than hot; Natural gesture than affected.

22 They which are of abundant, seem better than necessary things; As to have fair cloaths better than mean, to be a good Artizen better than a mean.

23 Things that cannot be given by men, are better than those that can: So wit is better than riches.

24 That is more to be chosen, the abundance whereof is more to be chosen than of any other thing.

25 Better is when a thing may be chosen without an other, than when without an other it is not to be chosen: As prudence is better than strength.

26 Of what things we deny the one, that the other may seem to be in it; that is the better which we would have seem to be in it: So many deny they took pains about a thing, that they may seem to be witty; therefore, wit is better than pains taking.

27 Such things as whose losse we take not more grievously, we are more blamed for, are more to be chosen, As children than riches, for we are more blamed if we be not sorry for losse of our children, than of our goods.

28 That

28 That which effecteth good, is better than that which doth not.

29 Conjugates follow mutually; therefore, if one be better, the other also shall be better; As the New Testament is better than the old; therefore, also a Minister of the New, is better than a Minister of the old.

30 That which pleaseth God, is better than that which pleaseth man.

31 That which we choose for it self, is better than that which we choose for glory.

And this much of a Notional Syllogism, and a comparative.

A Reall Syllogism, is, whose terms are Reall: that is, first Notions put without the mind.

And it is either { Contingent. a
Or Necessary. b

A Contingent is, whose contingent mean contingently disposed with the extrems, getteth a suspended and weak assent to the conclusion, and is called *opinion*.

A contingent mean, is that which is taken from a contingent place.

Contingent places be either { From the word. c
From the things. d

Places from the word, are either { 1 From the definition of a Noun.
2 From the Conjugates.

A place from the definition of a Noun, hath three Canons.

1 To what the definition and notation of a noun is given, to that also the defined thing is given.

2 When the definition and Notation is larger than the thing defined and noted, the consequence is of force onely negatively; As, it is not a sacred sign; therefore, not a Sacrament,

3 When

3 When the Notation is equall to the noted, the consequence is of force as well affirmatively as negatively : as, He foretels things to come, therefore he is a prophet : he is not a prophet, therefore he foretels not things to come.

A place of Conjugates hath three Canons.

1 One of the conjugates being put, another is put ; and one taken away, another is taken away ; as, Sin pleaseth not God : therefore not the sinner.

2 That which is given to one of the Conjugates, is given also to the other : as, Religion is contemned, because the Religious are contemned. They that have one God, one Spirit, one Baptism, ought to have Unity amongst themselves : In the Trinity there is Uniry, because the Father, the Son, and the holy Ghost are one.

A place from the things is either { Artificial. *b*
Inartificial. *i*

b Artificial, is, which containeth Terms arguing of themselves.

And it is either { First,
Or, rising from the first.

First, is, which containeth the first Terms.

And it is either { Inward. *m*
Outward. *n*

m Inward, is, which containeth inward Terms : as, Of the cause and caused ; of the subject and accident ; of the whole and the part.

The place of the cause and caused hath five Canons.

1 The far-off efficient cause being put, it is probable that the effect should be put : as, The clouds gather, therefore it will rain,

2 The

2 The cause *περὶ γάμους* and *περὶ κατασίχης* being put, it is probable the effect is put, and contrariwise; also the effect being put, it is probable such a cause is put: as, He loves her, therefore he will marry her; He married her, therefore he loved her.

3 The Instruments being put, it is probable the effect is put; and contrary, the effect being put, it is probable the instruments are put, and contrary: as, He reads good books, therefore he will be learned: He useth proper physick; therefore he shall recover health, &c.

4 From the common matter put or taken away, or the matter whereof, to put or take away the mattered, and so on the contrary, is a contingent inference: as, In *Germany* is much wood, therefore they have many ships.

5 From a voluntary end to the means, and from these to the end, is a contingent inference: as, He studied hard, therefore he means to have the degree of a Doctor, &c.

The Canons of Subject and Accident, Whole and Part, are four.

1 From the common accident being put unto the subject, is a contingent inference; as from the accident removed, to the removing of the subject: as, It is a black Bird, therefore a Crow: She loves the childe, therefore she is the mother of it.

2 From a common subject being put, to the putting of a common accident, and contrary, is a contingent inference: as, She is a Mother, therefore she loves the children: He is a *Cretian*, therefore a lyar.

3 The whole being put, it is probable this or that part is put: as, He is a man grown, therefore he hath a Beard.

4 Some integral part being put, it is probable the whole is put; and contrariwise: as, There is a foundation and walls, therefore a house.

Places of outward terms have five Canons.

1 The adherent being put, it is probable that is put which it is wont to cleave to, and contrary; As he goeth brave; therefore he is rich.

2 The contingent object being put, it is probable that is put, about which it is busied, and contrary; as, There are many sick; therefore, many Physicians.

3 The circumstance of place or time being put, it is probable that is put which is wont to be therein, and contrary; as, It is eight of the clock in the morning; therefore, he is not drunk: He was not seen about the house in the night, therefore, he is a thief.

4 The antecedent being put, it is probable the consequent is put, and contrary; as, The Moon is pale; therefore, it will rain.

5 The contingent consequent being put, it is probable the antecedent was, and contrary; as, It raineth; therefore, the Moon was pale.

Places of terms arising from the first,

Are either { From Description.
From Comparison.

The place from description hath one Canon.

To whom the lesse principal description agreeth, it is probable that the described agreeth, or agreeth not thereto; as, It is not a Bush bigger then a Bramble, with strong twigs, and red Berries; therefore, it is not the Dogg-bryar.

The place from comparisons, the place is either from { Consentany a } Comparison.
Dissentany b }

a From consentany comparisons, the place is either from, { Even.
Like.

The place from Even hath two Canons.

1. Even things agree to Even ; and what is given to the one, is given to the other of even things, and contrary : as *Rom. 5.* By one man salvation may be restored to the world; seeing by one man sin and death came on the world.

2. Where to one of the even things agreeth or not, there to it is probable the other also agreeth, or not ; as, *Christ* had power to heal the Palsie-sick ; therefore, he had power to forgive sins, *Mat. 9.*

The place from Like hath three Canons.

1. That which agreeth or not, to one of the like things, that also agreeth or not to the other : as, The rain returneth not back to heaven, but watereth the earth ; neither Gods Word returneth in vain.

2. To whom one of the Similies agreeth, or not, the other also agreeth, or not.

3. A similitude, or comparison allegoricall, if it should have any force in arguing, it must needs have authority in the Scriptures, and application Ministring by the Holy Ghost.

Of Proportionals, there is the same Judgement ; and what is affirmed or denied of one, by proportion, that is also of another : For as is the seed in the land, so is the word to the heart, but seed falling into good ground, bears good fruit ; therefore doth Gods Word likewise in a good heart.

Near to the place of Even and Like things, is the place from a singular thing and example, whose Canon is one.

Of Even and Like things, there is the same Judgement ; and that which agreeth, or not, to one singular of the same kinde, doth so to the other : as, *Abraham* was justified by faith, therefore also other men.

An example is either $\left\{ \begin{array}{l} \text{True.} \\ \text{Feigned.} \end{array} \right.$

True, which hath indeed come to passe.

Feigned, which is devised for the teaching of children.

And it is $\left\{ \begin{array}{l} \text{A Parable.} \\ \text{A Fable.} \end{array} \right.$

A Parable, is a feigned example, drawn from such actions of men, as may or are wont to be done.

A Fable, is a feigned example, drawn from beasts and other such things, whereunto humane actions do not agree.

From dissimilarity or comparison $\left\{ \begin{array}{l} \text{Uneven.} \\ \text{the places are from} \end{array} \right. \left\{ \begin{array}{l} \text{Unlike.} \end{array} \right.$

Uneven, either greater or lesser.

The place from the greater hath two Canons.

1. If there be the greater, there will also be the lesser, and whereto the greater agreeth; the lesse doth also; as, God hath given us life, therefore he will give us foed and rayment.

2. That which in the same proportion agreeth not to the greater, agreeth not also to the lesser: as, The Just is scarce saved, therefore much lesse the wicked.

The place from the Lesser, hath onely this one Canon.

If the lesser be not, then the greater will not be; as, Of our selves we cannot think a good thought; much lesse, do a good deed.

3. The place from Unlike, is either $\left\{ \begin{array}{l} \text{Simple.} \\ \text{Compound.} \end{array} \right.$

Simple Unlikes agree to Unlikes; and whatsoever agreeth to one of the Unlikes, as it is unlike, agrees not to the other:

other : as, Though beasts have all things common, tis unfitting men should.

For compound unlikes, they which are not proportionate, to them proportionals do not agree : as, A good shepherd deals not with his flock like an hireling : the hireling flies when the wolf comes ; therefore the good shepherd doth not so. And thus much of places Artificial.

Inartificial, is a place which argueth not of it self, but by the assumed force of an artificial place, and it is called the place of testimony.

Contingent testimony, is that which cometh from man as he is man,

The Canons of humane Testimony are 13.

1 Though no humane testimony as such, be of necessary truth, yet admitreth it certain degrees, and one is more strong, or weak than the other,

2 Proper, or ones own testimony of things, done or not done, especially in the worse part, if it be not wrung out of force, is counted for firm.

3 Publike testimonies of publike seals are firm.

4 Testimony of publike and long-lasting fame is also to be esteemed for meanly firm,

5 Old testimony is more worth than new.

6 Grammatical testimonies, to wit, which treat of the use, signification, quantity of words, syllables, &c. gathered out of the best Authors, are firm.

7 Testimonies Practick, that is Ethick, Politick, Legal, of honest, filthy, right, wrong, spoken of grave Authors, are firm.

8 Testimonies historical, of approved Historians, are firm.

9 Testimonies Theoretical of some great and received Author, alledged after reasons of a Theoretical conclusion, have great force.

10 Testimonie of many Wise men and Famous, is to be preferred before the testimony of one and an obscure man.

11 Testimony of a skilfull Artizen, is to be preferred before the testimony of another unskilfull, however famous otherwise,

12. Testimonies of ancient Fathers, if they be subordinate to the holy Scripture, have a force in proving Theologicall conclusions, but no proving humane, yet greater.

13. An Argument from humane Testimony negatively, is of no force.

And thus much of a contingent Syllogism.

Of a necessary Syllogism.

A necessary Syllogism, is, which hath a Mean or Medium of necessary disposition to beget in the minde firm and immovable assent to the conclusion. It is called Science.

The generall Canons thereof are three.

1. The Conclusion of a necessary Syllogism sometime is pure, & proper to one discipline; sometime mixed, or of divers Disciplines: as, *Onely Faith justifieth*, this is a pure conclusion; for both the terms *Faith*, and *justifieth*, are terms of Theology, and handled therein.

A natural body is in a place; this is pure; for only Natural Philosophy treateth of a place, and a body; but this, *Accidents in the Lords Supper are not without the holy bread and wine*, is necessary, and may be proved by a necessary Syllogism; but it is not pure; for the word *Accident* is Metaphysical or Logical; the other terms Theological.

2. In a pure conclusion we must needs use a Mean of the same kinde, that is, such as together with the extrem of the conclusion, pertaineth to one and the same discipline, and not to diverse.

3. Of a necessary Syllogism, the propositions also are necessary.

A necessary Syllo- § Monstrative, *Antike*. f
gism is either § Demonstrative, *Antike*. g

f Monstrative, is, whose Mean is taken from a monstrative place that is, from every place of necessary invention, except the place of the efficient cause, the end, and the effect. And

And it is either $\left\{ \begin{array}{l} \text{Artificial. } c \\ \text{Inartificial. } d \end{array} \right.$

Artificial places again are either of first Terms, or secondly of Arisen.

Places of the first terms be $\left\{ \begin{array}{l} \text{Inward. } a \\ \text{Outward. } b \end{array} \right.$

Inward, are they which are taken from inward terms, and they are nine.

1. From the Genus. 2. From the Species. 3. From the cause material. 4. The Formal. 5. The Subject. 6 The Accident. 7. The proper. 8. The whole. 9. And the part,

The first place of the Genus hath two Canons.

1. To what the Genus is given, to the same some Species must needs be given, but indeterminate; as, It is sin; therefore Original, or Actual.

2 From what the Genus is taken away, from that necessarily all the Species are taken: as, It is no sin, therefore neither original nor actual; therefore no sin.

The place of the Species hath two Canons.

1. To what the Species is given, to the same the Genus must needs be given: as, He is a man, therefore a living creature.

2. From what all the Species are taken, from it the Genus must needs be taken: as, It is neither original nor actual sin, therefore no sin.

The place from the Form and Specific difference hath two Canons.

1. Where the Form is given, or taken away, thereto the formal is given or taken away: as, Satyrs have no reason, therefore are no men.

The Art of Logick.

2. Whereto the Form is given, thereto the determinate matter must needs also be given; and contrarywise: as, *Nebuchadnezzar* kept the Form of a man still; therefore also the body.

The place from the matter hath three Canons.

1. Whereto the matter is given or taken away, thereto the mattered thing must needs also be given or taken away: as, Glorified bodies shall consist of the four Elements; therefore they shall be mixt

2. Whereto the matter is given, thereto the determined Form must needs also be given; and contrariwise: as, *Pigeons* have the bodies of men, therefore the Forms also.

3. As is the matter, such is the mattered thing: as, The Image is of rotten wood; therefore it is also rotten.

The place from the proper subject hath this one Canon.

Whereto a proper accident is given, or taken from it, thereto the subject also must needs be given or taken from it: as, *Christ* is God, therefore hath power to forgive sins.

The place from the proper accident hath two Canons.

1. Whereto a proper accident is given, or taken from it, thereto the subject must needs be given, or taken from it: as, *Christ* forgiveth sins, hath life in himself, and gives life to others; and therefore he is God.

2. That which is said of the proper accident in the concrete, is said also of the subject: as, A questioner is to be shunned, because a blab is to be shunned.

The place from the whole and parts hath three Canons.

1. The whole being put or taken away, needs must the parts be put or taken away: as, the whole Supper pertaineth to Lay men, therefore the Cup.

2. That which agreeth, or not, to an whole of the same kinde, that also agreeth, or not, to the part, if the attribute be such, as may by proportion agree to the part.

as, Water is moist, therefore every drop of water is so.

3 One principall part being destroyed, the whole is taken away. as, This building hath no Roof, therefore is no house: He hath no head, therefore is no living body.

Places of outward terms, are Circumstances, Object, Concomitancy.

The place of Circumstances hath this one Canon.

Circumstances being put or taken away, the adject is put or taken away; and the adject put or taken away, so is the Circumstance: as, The flowers are budded, therefore it is spring time: it is a body, therefore there is a place wherein it is.

The place of the necessary object hath also one Canon.

Whereto an even object is given or taken from it, there to that which is buſied about the object is given or taken from it; and contrariwise: as, He is exercised about the worship of Idols; therefore he is an Idolater: Christ is true God; therefore he is to be worshipped.

The place from the necessary Antecedent, hath this one Canon.

A necessary Antecedent being put or taken away, the consequent of it, is put or taken away: as, he is dead in Christ, therefore he shall rise to eternall life. The woman is not with childe, therefore she shall not bring forth.

The place from the necessary consequent hath also one Canon.

A necessary consequent being put, the antecedent is put: as, The woman brought forth, therefore she had conceived: he is a man, therefore he was a childe.

2. Places of termes arisen from the first, are of Definition, Division, and Opposites.

The place of definition and description principal,
hath one Canon.

Whereto a definition or description is given or taken from it, thereto the defined or described thing is given or taken from it; and that which agrees, or not, to the definition, or description, the same agreeth, or not, to the defined or described; and contrariwise: as, In the Old Testament there was a state of worshipping God in and by Christ; therefore in the Old Testament, there were Christians.

The place of Division hath these two Canons.

1. All the members of the divided being taken away, the divided it self is taken away.
2. One of the immediate members of a Division being taken away, the other is left.

The place of Opposites hath seven Canons.

1. Of Opposites, so far forth as they be such, the attributes are opposite; so as the opposition be made by the differences whereby the opposites disagree, and not by the genus or common accidents, and that proportion be kept between the causes and effects of the opposites. So, it follows not, Whitenesse is colour, therefore blacknesse is no colour; for the opposition is made by the common Genus. Neither followeth this, Evil works condemne, therefore good works justifie; for there is no proportion of good works to salvation, when our works cannot be said to be truly good of themselves, as Evil deeds are truly evil. Neither this, We must do good to our friends; therefore evill to our Enemies; For Enemies, In that respect that injuries are to be forgiven them, are not so much our enemies as our friends. Neither followeth, virginity is good, therefore marriage is evil; for goodnesse is common to both in divers respects But this followeth, Heat dissolveth things of diverse kinds, therefore cold gathereth them: Purity cherisheth the Spirit, therefore impurity expelleth it.

2. From

2. From what a disparate is removed, from it all in the disparate are removed: As 1 Sam. 17. God is not as man, that he should lye, or the Son of man, that he should repent.

3. One of the contradictories and repugnances being put, the other is removed; As, It is unbloody; therefore, it is no Sacrifice; For these are contradictory, 1 Cor. 10. Ye cannot drink the cup of the Lord, and of Devils.

4. One of the contraries in an high degree being put, the other is removed. As, He is in despair: therefore, he hath no comfort.

5. One of the privatives being put, the other is removed, and contrarywise: As, He is blinde: therefore he seeth not.

6. One of the Relatives being put, the other is put; As, God is an eternall Father; therefore he hath a coeternall Son. Christ is alwaies Mediatour and head: therefore, he will alwaies have a Church.

7. Whereto one of the Relatives is giving, thereto the other cannot be given in the same respect; And from the remotion of the Relative. to the remotion of the Correlative, the inference is right: As Christ is Davids Lord: therefore, he is not his servant.

An Inartificiall place, is necessary Testimony.

Necessary Testimony, is either $\left\{ \begin{array}{l} \text{Of God. } a \\ \text{Or of the Senses. } b. \end{array} \right.$

Gods Testimony is a sentence spoken of God.

And is $\left\{ \begin{array}{l} \text{Mediate.} \\ \text{Immediate.} \end{array} \right.$

^a
Testimony.

Immediate, which God uttereth without means of any Minister.

And it is either. First, By Vision, as of old to the Prophets.

Or Secondly, By Voice; as, at Christs Baptisme, Mediate.

Mediate, is, which God hath uttered by his Son sent in the flesh ; Or by inferiour Ministers, the Prophets and Apostles.

The Canons of Gods Testimony, Mediate, and Immediate, are twelve.

1. Gods Testimony is beleev'd for God himself, and his Authority, not for the mans sake by whom it was uttered.

2. There is no Divine testimony written this day ; But in the Bible.

3. All principles of Theologicall conclusions, pertaining to the perfection and Salvation of the Elect, are sufficiently delivered in the Scriptures.

4. Argumentation from Gods testimony, proceedeth both Affirmatively and Negatively in things pertaining to Salvation.

5. It ceaseth to be the testimony of God, if wrested either to a wrong sense or unmeet allegories.

6. From places or testimonies doubtful, Doctrines of faith are not firmly stablished.

7 That which by good consequence is gathered from any Divine testimony, it hath the same force with it.

8. What is proved or explained by the Scripture, that is understood to be also proved and explained by the true Church, Lawfull Councils, and Antient Doctors.

9. From Gods revealed will to his power, the argument alwayes is of force ; But it follows not, because he will not, that therefore he cannot.

10. From Gods will Indefinite and Hypothetical unto the simple execution thereof, an argument is not of Force : as, God would all men should be saved : therefore, they shall all be saved ; It follows not ; For that Will is Hypotheticall or Conditional, If they believe.

11. Gods affirmative Commandments are to be taken with limitation.

12. Gods negative Commandments do binde simply.

Testimony of sense, is that which every ones sense telleth him.

And

And it is $\left\{ \begin{array}{l} \text{Outward.} \\ \text{Inward.} \end{array} \right.$

Inward, is, which Laws of Nature and Conscience tells us.

Outward, is, that with the outward senses (as seeing, hearing, &c.) rightly disposed, and to the sensuall observation and experience doth confirm: *Matth. II. Go tell John what ye hear and see. Come see the place where the Lord was layed.*

And thus much of the first kinde of necessary Syllogism.

The other kind of necessary Syllogism hath the mean term from the place of the Efficient cause, the Final, and the Effect. And it is called Demonstration $\delta\epsilon\mu\omega\nu\alpha\tau\iota\varsigma$.

δ
Demonstration.
 $\delta\epsilon\mu\omega\nu\alpha\tau\iota\varsigma$.

And it is either $\left\{ \begin{array}{l} \text{Perfect, } \delta\iota\omega\tau\iota\varsigma. \\ \text{Imperfect. } \tau\tilde{\epsilon}\ \delta\tau\iota. \ b \end{array} \right.$

Perfect Demonstration called $\delta\iota\omega\tau\iota\varsigma$ (i. e.) Wherefore, is, whose mean is taken from the place of the efficient cause or end, for to get the knowledge of such a conclusion as wherein the accident is attributed to (or spoken of) his subject.

The general Canons of this Demonstration are eight.

1 Three things are in every demonstration. 1 The subject $\dot{\upsilon}\pi\omicron\kappa\epsilon\lambda\upsilon\sigma\tau\omicron\varsigma$. 2 The affection, or accident $\pi\acute{\alpha}\delta\omicron\varsigma$. 3 The cause $\alpha\iota\tau\iota\omicron\nu$.

2 The conclusion of a demonstration consisteth of two extreames, viz. the affection or accident which is put in place of the attribute; and then secondly, the subject wherein the affection is.

3 The foreknowledge of the conclusion is the same that was of others, viz. that the subjects both name and essence, and definition of the Essence be foreknown, and the name of the attribute or affection.

4 The finding of the mean also agreeth unto the general

ral precepts; For it is taken from the nature of the extremes, viz. the efficient cause of th. attribute, which often is the form of the Subject, and from the end of the same attribute.

9. A demonstration hath certain degrees; So that one exceeds another in necessity, and so hath propositions, one more necessary, another lesse.

10. Demonstrations are given in all kinde of disciplines contemplative, or practick, though the demonstrations of contemplative disciplines be more worthy.

11. There are given demonstrations aswell Negative as Affirmative, though the affirmative be more worthy.

12. A Demonstration perfect (*vs. Abs.*) hath great kin with the perfect definition of an accident: For the things that are in a perfect definition, as Efficient, Cause, End, and Subject, the same are also in a demonstration.

A perfect Demonstration, is either { Of the Efficient. *a*
Of the End. *b*

A Demonstration of the efficient cause, is, whose mean is taken from the place of the next efficient cause.

And it is either { Principall. *cc*
Lesser Principall. *dd*

cc Principal, whose mean is the next principal efficient cause; and it is either of the inward cause, or Outward.

Of the Inward, whose mean is the next principal efficient.

Outward, whose mean is the outward principal next efficient cause.

The Canons of both these are two.

1. whoso the next efficient cause is given, thereto the effect must needs be given; and from what the cause is taken, the effect is also.

2. A Demonstration of the inward cause, is perfecter than

then a Demonstration of the Outward cause : Examples of Demonstrations That which hath the guilt of sin, is wretched ; But all mankind since the fall, hath guiltiness : therefore, it is wretched. Whatsoever differeth from the Law and will of God, deserveth Gods wrath ; but every small sin differeth, &c. therefore, it deserveth Gods wrath. He that hath satisfied Gods wrath, hath perfectly redeemed us ; Only Christ hath satisfied, &c. therefore, he hath redeemed us. They that are constantly kept of God in the purpose of Election once made, their Salvation is sure ; But all the faithful are so kept ; therefore, their Salvation is sure. Whatsoever hath matter, is moveable ; Every naturall body hath matter ; therefore, Every naturall body is moveable.

Lesse Principall, is, whose mean term is a lesse principall efficient cause, viz. either Impulsive, or first Instrumentall.

The Canon hereof, is,

Whereto the Impulsive and Instrumentall which is more matching, is given ; thereto also must needs be given the effect and power or faculty unto which the instrument is ordained : and contrary, from what the instrument is taken, from that also the end or effect must needs be taken ; Thus Demonstration is made, that fishes do not breathe, because they have no lungs, that the wicked eat not Christs body, because they have no faith ; So man is a communicable and sociable creature, because he hath speech, the Instrument of communion.

Demonstration of the end, is, whose mean term is drawn from the place of the finall cause.

The Canons thereof are two.

1. The end being put, (specially the fitted end) needs must the means to the end be put, or contrariwise.

2. Even as the end is either fitted and principall, or lesse principall, accordingly the Demonstration is more perfect, or imperfect. Thus Christ shewed they ought not to buy and sell in the Temple, because it was an house of prayer. Heresies must be, that the approved may be known ;

Imperfect

The Art of Logick.

Imperfect Demonstration (or *q^d 371* : That a thing is) whole mean is taken from the place of the effect.

The Canons hereof are three.

1. The effect being put, the cause is necessarily put ; and the effect being taken away, so is the cause (as it is a cause of that effect) ; So it is shewed that some men are Elect, because in time they are called justified, and sanctified ; and contrary, that some are not Elect, because they are not called, &c. So, Infants are sinners, because they die, *Romans 5.*

2. Even as the effect is either principal, or lesse principal, accordingly is the demonstration more or lesse principal.

3. When by the effect it is proved, the cause is, or not ; on the contrary also, the effect may be shewed by the cause ; which Reciprocation, Logicians call Regresse.

And thus much of Demonstration.

Of an Apparent Syllogism, or Fallacie.

Hitherto we have treated of a true Syllogism ; Now followeth the Apparent, which hath a false disposition or matter, painted with a shew of a true ; Whereupon ignorance or naughty disposition is begotten in the mind.

The Doctrine hereof hath two parts.

The 1. whereof is the caution of a deprehended Fallacie.

The 2. is, Shewing and loosing of that Fallacie.

First, Of the deprehension, or finding out of a Fallacie.

A Sophism or Fallacie is a deceit, either { In Form. *a*
In Matter. *b*

A Fallacie of Form, is, when men sin against the disposition

tion of a Syllogism, violating the Canons, either generall
or speciall, of all the Figures.

A Fallacy of matter, is either { In words. *m*
In things. *n*

A Fallacy of words, is either in a word { Simple. *g*
Compound. *b*

A fallacy of a simple word { Of want of use. *k*
is either { Of Ambiguity. *l*

A Fallacy of the want of
use of a word, is either { 1. For the darknesse of it.
2. For the oldnesse.
3. For the Novelty.
4. For the impropriety of it.

These are opened in the first part of Logick.

Ambiguity of a word { For the many meanings.
is either { For the doubtfull forming.

Ambiguity for many meanings, is, when a term in a Syl-
logism is taken in this meaning or in that: as, That which
is begotten beginneth to be: The Son of God is begotten,
therefore beginneth to be.

Here is ambiguity in the word, *begetting*; for the genera-
tion that is in the Holy Trinity, differeth generally from
the generation of the creatures.

Ambiguity for the forming { 1. Orthography.
of a word, is either in re- { 2. Etymologic,
spect of the { 3. Prosodie.

1. In respect of the Orthography, is when the doubtful-
nesse ariseth from the diverse pronouncing of word, or
writing: as, If a man, pretending to make one his *beir*,
should say, I will make thee mine *bair*; or to commend one
for a full-bardy souldier, saith, He is foot-bardy.

2. In respect of the Etymologic, doubtfulnesse is which ariseth either of likenesse of ending, or confounding one number for another. This Fallacy is called, *ῥῆμα λείξεως*.

3. In respect of Prosodie, doubtfulnesse is which ariseth from wrong pronounciation; a long syllable for a short, or otherwise.

A Fallacy of a compound word, is, which is in a sentence and is called *Amphibolie*; which is a double uncertainty of the meaning in a sentence.

1. Of the construction and distinction.
And it ariseth
either } 2. Of the phrase;
3. Of the Composition and Division.

1. Of the construction, when the coherence and construction of words is doubtfull.

2. Of the phrase, when not the construction, but the kinde of speech makes uncertainty of sense: as, Christ went up to Heaven to fill all things. Therefore, His body is diffused everywhere. It is a Fallacy, by not understanding the Apostolic phrase, *fill all things*, which is meant of the effusion of the Holy Ghost, not of the diffusion of his body.

3. Of Composition and Division, when words are joyned together which should be disjoyned, or contrariwise: as, Two, and three are even and odde; but five are two and three; therefore five are even and odde.

- A Fallacy in things,
is either } 1. About the conclusion, or question. *a*
2. About the proof of the conclusion, or ordering the Mean. *b*

- About the conclusion,
is either } 1. Asking of many questions, *πολλὰ ζητήσεις*.
2. Asking of another question, *ἑτέρα ζητήσεις*.
3. Ignorance of the signification, *μὴ ἐπιστάμενος τὴν ἀντιφάσεων*.

1 The Fallacie of many questions, is, when many questions or conclusions are confounded in one: As, Were *Moses*, and *Aaron*, and *David*, good Kings? Here is confusion; for *Aaron* was not a King. So, when we ask, Have you left your stealing? If one answer, Yea, it intimateth he was once a thief; if he answereth, No, he argueth himself now to be a thief.

For every ambiguous question is not one, but manifold. As, Was *Judas* elected? Here tis doubtful, whether tis meant Election to life, or election to an Apostleship; therefore, it is no simple question.

ubiquitaries reason thus; That which is Sacramentally united with the Bread, is eaten; though not after a natural, yet a supernatural manner. But Christs body is Sacramentally united with the Bread: Therefore, it is eaten, though not after a natural manner, &c. Answer is, In the conclusion, there is *πολυζήτησις*.

For two questions are confounded, { 1 Whether Christs body be eaten.
2 How it is eaten.

2 Ignorance of the Argument or Elench, is, when either the state of the question is quite turned and wrested, or the adversaries conclusion is not directly opposite to our Thesis, according to the Canons of lawful opposition: As, They that are conceived and born in sin, are not holy, The children of the faithful are conceived and born in sin: therefore, the children of the faithful are not holy. Here is ignorance of the Elench; for the conclusion is not directly opposed to our conclusion, who make the children of the faithful holy with the holiness of the Covenant of calling and promise; But the Adversaries conclusion speaketh of holiness which is immunity from sin.

About the proof of the conclusion, Fallacies are either { 1 About the finding of the mean.
2 About the premisses risen of the disposition of the mean.

N

1 About

1 About the finding of the mean is

{ Begging of the question. *a*
 { Assumption of a false mean, *b*

a Begging of the question (or *Petitio Principii*) is when no mean is taken, but the conclusion is proved by it self, repeated either by the same words, or by others Equivalent: As if one would prove pleasure to be the chiefest good, because delight is the chiefest good; or one would prove *Jeconias* to be the father of *Salathiel*, because *Salathiel* was son of *Jeconias*.

b The Fallacie of a false mean, is when to prove a question, there is taken a false mean having the appearance of a true: Whereupon, either the Major, or Minor is false.

A false mean is either { Of Contingency apparent.
 { Of Necessity apparent.

Of Contingency apparent, is that which seemeth to be drawn from some place of contingent invention: As *Peter* is named *à Petra*, the Rock of the Church: therefore, he is the Foundation and Head.

Answer, It is a Sophisticall Syllogism taken from the place of false Notation; And so of the places.

Of Necessity apparent, is, when a false mean is so propounded as taken from some necessary place, Monstrative, or Demonstrative: As from a false Genus, false Difference, Definition, &c.

As, Extream Unction is a Sacrament: therefore, it scaleth spirituall graces: It is from a false Genus.

Also, That which is united to the word, is every where; Christs humane nature is united to the word: therefore, it is everywhere; It is a Sophism, having for the Medium a false efficient cause.

- 2 Fallacies about the premises or disposition of the mean, are
- Fallacie of the consequent.
 - Fallacie from a thing spoken after a sort.

Fallacie of the consequent, is, when there is a naughty connexion of the mean with the greater extreame in the Major Proposition: as, He that said, Bread is my body, said, my body lieth hid in the Bread, but Christ said, &c, *Ergo* It is a Sophism of the consequence, whereof no good reason can be rendred: So Christ taught us to pray for our daily Bread: therefore, Lay-men must not drink of the Wine in the Lords Supper.

Fallacie from a thing spoken after a sort, or spoken simply, is when from the mean Term disposed with limitation, or after a sort with both or either of the extreames, a conclusion is interred absolutely and simply true: as, He that is lesse then the father is not equall with him; Christ is lesse then the Father. *Joh. 14.* therefore, he is not equal with him. It is a Sophism from that which is limited, to that which is not limited. It should be thus, He that is lesse, simply and in all respects, is not equall: but then the Minor is false, For Christ is lesse, not in degree of Essence, or of substantiall perfection; But, First, By hiding the Godhead in the Scate of Humility. Secondly, By Office of Mediatour, whose parts he handleth with the Father. So he that saith, thy words are words, saith true; He that saith, thy words are lying words, saith, thy words are words: therefore, He that saith thy words are lying words, saith true. *Answer*, He that saith thy words are words, viz. Absolutely, or Indeterminately, not adding false difference, saith true, and so the Minor is false. Under this is contained *Fallacia Accidentis*.

Of the loosing or soluting of Fallacies.

The Detection and loosing of Fallacies,

Is either

- True. a
- Apparent. b

N 2

True

True Solution, is the shewing of the deceit used by the Sophister.

And it is either } Direct. *a*
 } Indirect. *b*

a Direct, is when answer is made directly to the Syllogism Shewing, and naming the fallacie.

And it is either of the } 1. Forme.
 } 2. Matter.

Solution of the Form, is the rejecting of the Syllogism; by shewing some Syllogisticall Canon against which the form of it sinneth.

Solution of the *matter*, is either of the } Word.
 } Thing.

Solution of the word, is, when the ambiguitie of simple words, and the amphiboly of joynd words is shewed and distinguished.

Solution of the *Thing*, is, either of the } Question.
 } Proof.

Solution of the Question, is, when the state of the controversy is rightly constituted, the manifold question discerned, and the fault of evil opposition shewed.

Solution of the proof, is either } 1. Finding of the
 about the } Mean.
 } 2. Disposition with
 the Extreams.

About the finding of the Mean, is either the shewing, and denying of a vicious consequence in the Major, or a limitation: when there is a fault by omitting a limitation.

So there are in all, five direct Solutions and answer^o the matter.

- 1 Distinction or explication of a word simple or conjoyned.
- 2 Information and distinction of the conclusion or question,
- 3 Denyal of one of the Premises.
- 4 Rejection of a naughty consequence. And
- 5 Limitation.

Of these three be three Canons.

1 When the form is plain, straightwayes we must think of the conclusion of the proposed Syllogisme; and see whether it be constituted rightly, or opposed to our position.

2 When the conclusion is plain, We must answer to the Premises either by distinguishing and limiting, or by denying.

3 We must never answer by denyall when the argument may be soluted by distinguishing and limiting.

Indirect Solution, is when we answer indirectly, and thwartly to the Syllogism proposed.

And that is either unto the { Thing. †
Person. * *

Indirect answer unto the thing, is either {
1 By Retortion.
2 By Contrary objection.
3 By shewing contradiction.
4 By opposition of equal or lesse private authority.
5 By comparison, &c.

1 Answer by Retortion, is, when we shew that the mean or proof brought by the adversary maketh for us, or overthroweth the same conclusion which he would prove by it, or at least other assertions of the adversary: As, Christ is first begotten before the creature: therefore he is a creature.

Answer, Nay, therefore he is not a creature, because he was begotten before any creature was.

202 Solution by contrary objection (*κατ' ἀντιρροπὴν*) is when the objection is not solved, but another stronger objection is propounded to the adversary: So Christ answered them that would have the Ointment sold and given to the poor, by opposing a stronger reason: The poor ye have alwaies with you, but me not.

3 Showing of contradiction, *ἀντιστοιχία*, is when we show contradiction in our adversaries words : As, when the Papists except that in their Mass, Christ is not crucified again, because the sacrifice is unbloody ; it is *ἀντιστοιχία* : for a Sacrifice and unbloody are contradictory.

A. Opposition of equal authority, is, when to an humane Testimony we oppose another Testimony as good, or better.

5. Comparison *with like absurd*, is when we compare our adversaris argument with the like absurd.

Indirect answer unto the *person*, is either { A Blame.
A Comparison.

A Blam or chiding (*ἐπίπληξις*) is, when we blame the adversary for that he disputeth against Piety and Honesty, or against manifest sense and Experience.

A Comparison of the like, or greater, is, when we put away any thing objected against our or an others person, with an other personall objection: As, Christ, when the Pharisees blamed his Disciples for eating with unwashed hands, answered, Why do you also transgresse Gods Commandments by your traditions?

b Apparent Solutions, are, by which nothing is fully answered; Only in shew something is said.

Of this Solution there be five sorts.

1 The first, when nothing is answered to the Syllogisme propounded: But somewhat is said of the thing generally, lest the Answerer should seem to say nothing.

2 When

2 When generall and ill understood Fallacies are applied, which pertain not to the Syllogism proposed.

3 Provocation unto wrath.

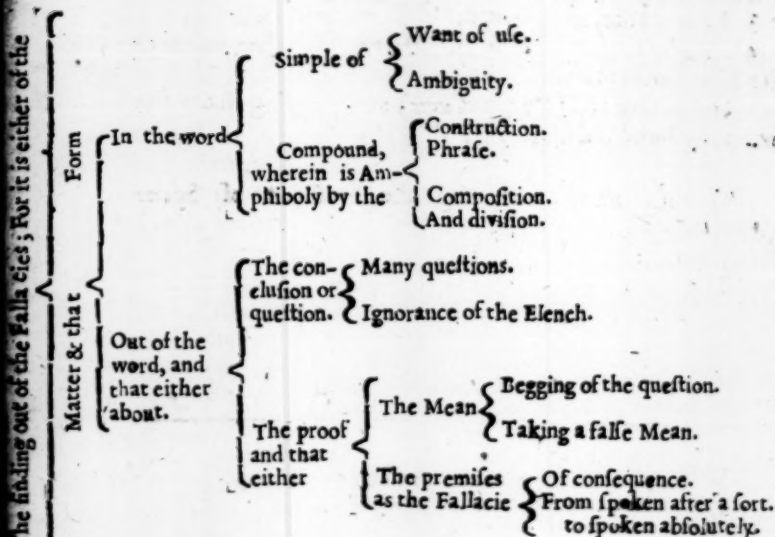
4 Is a setting at naught (*ἑξουσιάζειν*) when we mock the adversaries reasons as light.

5 Is running aside (*παρέκκλισις*) and leading from the matter in hand (*ἀναγωγὴ*)

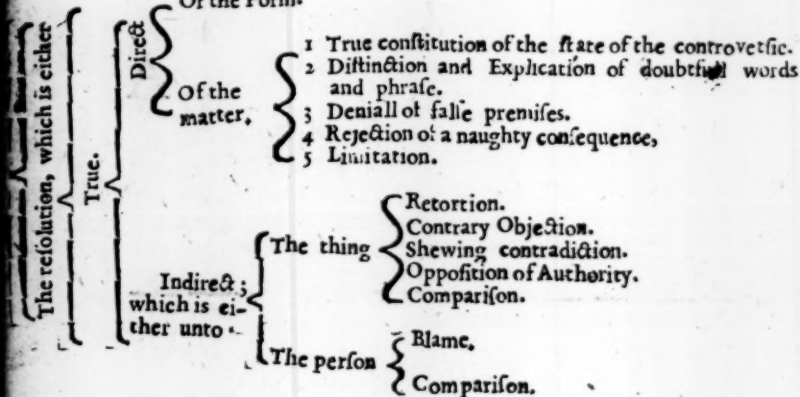
And thus much touching the Doctrine of Syllogisme.

A

A Type of the whole Doctrine of the *Fallacies*.



Of the Form.



- Apparent,
- 1 When nothing is answered to the matter.
 - 2 Applying of a fallacie ill understood.
 - 3 Provoking of the Adversary.
 - 4 Setting at naught.
 - 5 Running aside.

A Syllogism is to be considered.

Specially under condition of some certain matter, and it is either.

Apparent of which see before,

True

Necessary.

Monstrative from places.

Demonstrative, or Apodictike, which is either

Reall which is either,

Contingent which is either

Of things which is either

Artificial, which is either

Risen of the First from

Comparison.

First.

Artificial.

Artificial.

Definition. Opposites.

Inartificial or testimony,

Perfect The efficient.

Imperfect The End,

from the place of the effects.

Inward. Genus, Species. Matter, Form, Proper Subject, Proper accident, Whole, parts.

Outward. Circumstances. Objects concomitants. Of God.

Of the Senses, Principal.

Less principal.

from the place of the

Commonly

Secondary either

Indirect,

Primary. Secondary.

Both which are

Simple. Compound:

Conditional Disjunctive.

Uniform. Biform, or Dilemma.

Direct,

Enthymeme. Confecution of sentences. Induction. Sorites.

Notionall

Of the word Definition. Conjugates.

Inward. Cauted caused. Subject, Accident. Whole, part.

Outward. Adjacent Object. Concomitant,

Description. Consentany. Even. Example, Like.

Dissentany. Vneven. Great. Vnlike. Less.

Inartificial, Humane Testimony.



OF
M E T H O D,
OR
O R D E R.

Hitherto hath been the directnesse of discourse Illative.

Now followeth the directnesse of discourse Ordinate, which is an act of the minde or understanding proceeding from one part of Doctrine to another, by conferring them one with another, & knitting them together with the help of the precepts of the Method.

Method is the constitution of the parts of Doctrine, from a certain beginning unto a certain end.

And it is either { Artificial. a
{ Inartificial. b

Artificial, is which is Instituted according to the Nature of Things, and Rules of art.

The Canons hereof are five.

- 1 Let no Part be wanting, none Overplus.
- 2 Let the proceeding of Method imitate the natural proceeding and order of things; going on from things first and best known, to things after.
- 3 The parts before and after distinct between themselves, must

must agree with a kind of Harmony, in a certain beginning and end, or scope.

4 The knitting together of things before and after, should be shewed in the Chapters, and Heads of the Treatise by Bands and Forms of Transition.

5 Let all the parts of the Method be of the same kinde.

Method also is either $\left\{ \begin{array}{l} \text{Compositive, Synthetical. } a \\ \text{Resolutive, Analytical. } bb \end{array} \right.$

The Canons of the Precepts of a Discipline are two.

1 Let every Precept be, Definition; Division, or Canon.

2 Let the Precepts be True, Methodical, Profitable, and informed with proper and perspicuous words.

Compositive Method, is wherein the parts of a contemplative Discipline are so disposed as that progresse is made from the Universal Subject of contemplation unto the particulars, and so from Simples to Compounds.

The Canons hercot are five,

1 The parts of Compositive Method are three; First, the Subject. Secondly, The beginnings or causes, Thirdly, The affections.

2 The subject of a Science is necessarily one in Unity of Collection, and of Universality

3 The Subject is foreknown. First, That it is, Secondly, What it is. Thirdly That it hath certain Properties, or Affections.

4 The beginnings are foreknown that they are, and what they signify.

5 The Affections are foreknown what they signify.

Resolutive Method, is, wherein the parts of an operative discipline are disposed so as that from the knowledge of the end, the progresse is made to the knowledge of the beginnings or means, by which that end may be brought into his subject,

The Canons hereof are six.

1 The Parts of this Method are three. First, the end to be brought in. Secondly, the Subject whereinto it is brought. Thirdly, the beginnings or means by which the end is brought in.

2 The end is foreknown; First, that it is, or that it may be produced: and Secondly, What it is.

3 The end hath double accidents; Of which, some pertain to the finding of the means by which it should be produced, and they are to be known at the first; Others pertain to the Possession and conservation of the end, and that is not needfull to be foreknown.

4 The Unity of an operative discipline, dependeth on the Unity of the end.

5 The Subject is foreknown. First, that it is. Secondly, that it is capable of the end. Thirdly, that it hath accidents, which pertain next unto the end.

6 The means are not foreknown, but are handled in proceeding from Universals to Particulars; from Simples to Compounds; so as that they be profitable, and sufficient for the end.

b Particular Method, is wherein a certain and special theme is disposed.

And it is either of a theme, $\left\{ \begin{array}{l} \text{Simple } a \\ \text{Compound. } b \end{array} \right.$

a Method of a Simple, is, in which a simple Theme is handled and declared.

And it is either $\left\{ \begin{array}{l} \text{Principal. } 1 \\ \text{Lesse Principal. } 2 \end{array} \right.$

Principal, is, in which a full Progress is made from simples to more compounded.

This Progreſſe hath nine parts;

1 The name or word of every ſimple thing is conſidered; whether Concrete, or Abſtract; Withall the definition of the name is given, &c. If it be ambiguous, it is diſtinguiſhed.

2 The Genus of the thing is found out by looking in the predicamental order.

3 The cauſes are found out and put; In ſubſtances, in reſpect of the Eſſence, Matter, and Form; in reſpect of the Exiſtence, Efficient, and End; In accidentals, becauſe Eſſence and Exiſtence fall together, the Efficient and Finall cauſes, the Object and the Subject are found out.

4 If it be a ſingular accident, alſo the antecedents, conſequents, and other circumſtances are conſidered.

5 The whole definition is made, viz. divers, even as the Theme is either Accident, or Subſtance.

6 The proper accidents and Effects of this thing are propoſed, and often alſo the adjacents and concomitants are taught.

7 The theme is divided into the parts chiefly integrall; For the diviſion into the Species, if the theme be a Genus, is kept till the laſt place, if one would handle the matter at large.

8 The things akin unto it are laid down.

9 The things diverſe and oppoſite are added.

Leſſe Principal, is, when firſt the Definition is laid down, and then it is reſolved by parts.

The Method of a compound or conjoynd theme, is, wherein the handling of a conjoynt queſtion or problem is inſtituted.

The parts thereof are eight.

1 A right conſtitution of the problem or ſtate of the controverſie.

2 A choice or ſetting down of a poſition, Negative; or Affirmative, which you will defend.

3 A foreknowledge of both extreames, viz. of the antecedens and conſequent; as touching Limitations, Definitions, Diſtinctions, and ſo the preſuppoſition of thine Hypotheſis.

4 Con-

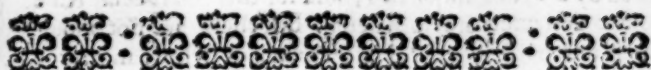
- 4 Confirmation of thy position.
- 5 A laying down of the adversaries position.
- 6 A foreknowledge and refutation of the adversaries distinctions.
- 7 A solution of the adversaries Objections.
- 8 A repetition of the proved position, and a collection of consequences or conclusions.

b

Inartificial Method, is, which is instituted not so much by the Order of Nature and rules of Art, as by the circumstance of the Learner and Auditor at the discretion and pleasure of the Teacher and Learner.;

And thus much of the whole frame and body of the art of Logick.

OF



O F
The use and Exercise
O F
LOGICK.

AFTER the absolute Frame or method of the Precepts of Logick, followeth in order of Nature, and of Doctrine, the use and Exercise of the Art more fully and plainly to be delivered.

Exercise of Logick, is a function of the mind or reason, whereby the Precepts of art comprehended in the mind are indeed and work applied to the things that are to be known out of the art.

And it is either } Particular,
Universal.

The particular or special Exercise of Logick, is, when some one particular Logical precept, is by the example thereof illustrated and exercised: Unto this speciall use there need no other direction then the frame of Logical Precepts before laid down; For there the use through every Precept is declared by special Examples,

The Universal Exercise, is when some whole Rank of Logical precepts is applied to things that are to be known or recognized: Like as a Smith, when some litle part of a work is to be done, taketh in his hand the Hammer onely, or the Tongs; But when he hath a whole work to do, he useth the furniture of all his Smiths Tools.

So in Logick, sometime the genus, or the cause, or some

accid

accident of a thing only, is to be dealt of, and proved or refuted by a Syllogism or two; and for this the special Rules before delivered are sufficient: But these are not enough when one hath a general argument, or whole matter to treat of Logically. For a larger course is now to be taken.

This Universal Exercise is either

{	The handling of a thing, called <i>ἡρέσις</i> .
	The recognizing of a thing handled, called <i>ἀνάλυσις</i> .

Of the Tractation or handling of a thing,
called *Γένεσις*, or Generation.

Tractation (or Handling) is the meditation of a Theme, or matter to be done by Instruments of Art.

And it is either

{	Simple. <i>a</i>
	Conjunct. <i>b</i>

a Simple treating, is, whereby a simple Theme is explained. A simple Theme is one thing signified by one Term only.

The handling of a simple Theme, is either

{	Universal.
	Singular.

The general Canons of handling a Theme are five.

1 Let the name of the propounded theme be considered, whether it be simple; and if it be not simple, but combined of many words, whether it may be reduced to one simple word, either in the Latine, or in the Greek, or other tongue. For a word of that language is to be preferred, which signifieth a simple thing most simply.

2 When the word is found to be simple; Let it be considered whether it be a Noun Abstract or Concrete.

3 It is also to be considered whether the word of the proposed Theme be certain, or ambiguous; and if it be ambiguous, let it carefully be distinguished.

4 Let

Let there be added a definition of the Noun; Either $\chi\tau\iota$ λέγειν, according to the term, or $\kappa\alpha\lambda' \epsilon\tau\upsilon\mu\omicron\lambda\omicron\gamma\iota\alpha\nu$, according to the Etymologic and Notation: And especially the latter.

5 Having considered the definition, think then carefully of the Genus (or general) of a Theme; Name y, in what order of things, and how it is placed: and if it be nowhere found in this order among the predicaments, let it be counted for a *Nons*; And so the handling of it be ended with the consideration of the Name.

For example. If a man would treat of Purgatory; First, let him weigh the name; Then mind the Definition and Declaration of the Name by the Etymologic, viz. That by this Name is signified some Infernal fire; But somewhat gentler, wherein the souls of them that are to be saved, must be purged, and rosted therein, so long as till full satisfaction be made for their sins. This Declaration of the name sheweth that such a fire there is nowhere; therefore, Not to be sought in any predicament (or Rank of things.) And so it is but folly, either to define it, or declare it by the causes and properties thereof. But here note, that this consideration, *whether a thing be or not*, is not to be according to the Existence ($\epsilon\upsilon\pi\alpha\sigma\chi\epsilon\iota\nu$) in some certain place, or time; but it is to be minded essentially ($\kappa\alpha\lambda' \omicron\upsilon\sigma\iota\alpha\nu$) As if one would treat of Christs Incarnation; The question, *whether it be or no*, is not to be minded so, as whether it be to day, or whether it shall be; But this is enough, that at any time it hath been, and now also dureth in effect, although Christ be no more Incarnate, nor brought forth. The like is also to be minded for things to come, as the day of Judgement, Resurrection, &c. For though these have not yet Existence, yet have they Essence; and because it is sure they shall be, they are to be treated of, in order and manner of things that now are.

Treating also is either $\left\{ \begin{array}{l} \text{Of a Perfect} \\ \text{Of an Imperfect} \end{array} \right. \left. \vphantom{\left\{ \begin{array}{l} \text{Of a Perfect} \\ \text{Of an Imperfect} \end{array} \right\}} \right\} \text{Theme. } a \ b$

A perfect theme, is, that which is perfectly placed in the order of things or predicaments; as an Universall thing, one, and whole by it self.

And

And it is either } Substantial.
 } Accidental.

The treating of both these is either } Primary. 1
 } Secondary. 2

A Theme
substantial Primary treating is, which, when the beginnings of the Definition are foreknown, gathereth from them the Definition, and then useth the other Logical terms for explaining the term, according to those Canons that follow pertaining to the explication of a substance.

1 When the name of the theme is weighed, and the lawfull Genus found, let the difference be sought for, either by the predicamental Tables, or by some notable effect, or antecedent of a Theme known to the senses.

2 When the Genus and difference are found by its self, the Definition must be gathered and made.

3 The Definition of a substance being gathered, the form thereof and matter is distinctly to be considered.

4 Let the Form then be assigned, and (so far as the perspicuity of the Doctrine will suffer) declared.

5 After the Form, let the matter generally be weighed.

6 After, the Integral parts, which make the matter entire; let those parts at least be considered which are most principal, and primary Instruments to bring forth the operations of the Form.

7 The efficient cause Principal and Instrumental, although it pertains not to the Essence of a Substance, yet it is to be considered for the knowledge of the Existence; The like is also to be minded for the final cause.

8 The proper accidents or effects flowing from the Form, and cleaving to the whole compound, must be reckoned.

9 Then let there be added a Division of the proposed substance, by the Primary accidents, by the Integral parts, inferring a manifest distinction; and if the Theme be a Genus, let the Species thereof be recounted, which
 after

after may have their peculiar handling also if the handler be so purposed.

10 Let the things that are akin to the proposed substance be added.

11 And then let there be shewed the things that are diverse and contrary.

For example, Let this Theme *Animal* (or *living creature*) be to be handled.

1 Weigh the name, which in Latine is of *Anima*, a *Soul*; which signifieth any living Form, which also is in plants; but is by an excellencie given to other sensible creatures, in whom the Soul more manifestly appeareth by sense and motion. In Hebrew it is called *חיה* *Cajah*, of life; for that such creatures seem onely to have life. Of the ambiguity of the name, or concretion, or abstraction, there needs none ado.

2 Next look for the Genus which is found in the Table of Substances to be a living body.

3 The difference restraining that Genus, is found in the same Table also to be sensitive.

4 The whole Definition therefore is, that an *Animal* is a living body sensitive.

5 The matter far off of an *Animal*, are the *Instruments of life*; The next matter is the Instruments of sense and motion; which taken all together are called the body of the *Animal*.

6 The Form neer, is the Soul Vegetant; the neereft, is the *Soul sensitive*, which by the effects or proper accidents that cleave to the *Animal*, are as it were by the latter words evidently perceived.

7 Then come to the existence, and here weigh the efficient cause of an *Animal*: The principall Efficient, is the *Forming of the youngling of an Animal*, whereby the sensitive Soul is united with the body; The Instrumental cause is the Seed, the Womb, the Birth; all which may be treated of peculiarly.

8 The end is to be shewed wherefore an *Animal* was at first created, and wherefore in time gendered; The *End Universal* is the glory of God the Creator; The particular is the Complement of all the degrees of life, and so the perfection of the World and Creatures, which require not onely a Body vegetant, but also sensible.

9 The proper accidents of an *Animal* are principally,
 1 Sense Inward and Outward. 2 Appetite. 3 Going.
 Secondly, 1 Breathing. 2 Watching, Sleep, Dream-
 ing.

10 The Integrant parts of the body or matter, are,
 1 Similary parts, as blood and other *Humours*, *Flesh*, *Bones*,
Sinews, *Arteries*. 2 Dissimilary parts principall, are the
 Brain, Heart, Stomack, Liver; and other lesse principal all
 over the body.

11 The division of an *Animal*, is, 1 By reason of the
 temperature and parts, into *Male*, and *Female*. 2 By the
 Species, into *Man* and *Beast*, which also may severally and
 distinctly be considered.

12 The things akin to an *Animal*, are, Plants, especi-
 ally those that are called *ζωόφύτα*, Plant *Animals*, and half
Animals, as Sponges, &c.

13 The Opposites of an *Animal*, are things that want
 'Life, Sense and Motion; and Poysons, which are pernicious
 to the Life.

And thus much for handling a perfect Theme Sub-
 stantial.

b A Theme *Accidental* is handled according to these Ca-
 nones.
A Theme
accidental.

1 After due consideration of the name, First think of
 the *Order* or predicament of the proposed accident; whether
 it be quantity, quality, Action, Passion, or Relation; For
 so it will appear, whether it indeed be an accident, or a *Non*
ens, and feigned Theme.

2 When the Genus is found, let the *Subject* of the acci-
 dent be shewed; And withall, consider whether the accident
 treated of, be common or proper; For these two have diverse
 explications; Wherefore an accident should alway be redu-
 ced to his first and even subject, that of a common it may
 be made proper.

3 Because Relation is busied between two Subjects, of
 which one is called the Relate, the other the Correlate,
 therefore in explaining of a relation, both of them must be
 assign'd.

4 The Object then is to be minded about which the acci-
 dent is occupied; and Objects bear rule in qualities and
 Actions.

5 The

5 The Principal *efficient causes* must be found out; First the neer, and then the neereſt cauſes.

6 In Relations the *ground* or Fundament must be enquired, and it differeth not from the neereſt cauſe.

7 Then let the end of the accident be ſhewed, which alſo bears ſway chiefly in quality and action.

8 But in Relations the *Term* must be enquired, which is the ſame with the final cauſe.

9 Then give the definition of the accident according to the nature of every predicament, aſſigning beſides the Genus the eſſential terms, as the Subject, the Object, the Efficient cauſe, and the End.

10 Often alſo the Antecedents, Connexes, Circumſtances and Conſequences are to be reckoned; As when the propounded Theme is an Action or Paſſion.

11 The effects of the propoſed accident must be diſtinctly told.

12 A *Diviſion* must be added, either into the Species, if the propoſed accident be a Genus: or into other members ſitting to an accident.

13 Then ſhew the things akin thereto, or which have ſome affinity of nature with the propoſed theme.

14 Let the diverſity which is between Themes akin be ſhewed.

15 Let the Opposites or Contraries be added.

For Example. This accidental Theme is to be handled; *Calling upon God.*

1 The Name is abſolute.

2 The Genus in the Predicament of Action is found to be this, *a religious action.*

3 The Subject of this Action, is, *a faithfull man.*

4 The Object, First, to whom it ſhould be directed, is the *whole Trinity*, and the Father of our Lord Jeſus Chriſt, reconciled by the Son. Secondly, The Object of the things to be aſked, which are Bodily and Spiritual. Thirdly, The Object for whom, is *our ſelves and others.*

5 The Efficient cauſe principal, is, *the manner of confidence*, ſtirred up by the holy Ghoſt, by the authority and merit of Chriſt the Mediator, *Joh. 4. Rom. 6.* The outward moving cauſe (*παρακλήσις*) is Gods commandment, and his promiſe to hear us, *Joh. 16. Pſal. 150.* The inward moving

ving cause (*απονομιάν*) is, the feeling of our own wants, and remembrance of Gods benefits before received: The Instrumentall causes are the Form given by Christ, *Mat. 6.* and our members Inward and Outward; as heart, tongues, eyes, hands, knees, &c.

6 The end, is the obtaining of benefits, and thankfull glorifying of God.

7 So the whole definition is this; Invocation is a Religious action, or operation from the motion of faith, kindled by the holy Ghost, with trust and authority of Christ the Mediatour, done by a faithfull man, and directed unto God propitious in his Son, for the obtaining of good things needfull, and for the glorification of Gods holy Name.

8 The proper accidents or things requisite, are, First, That it be done in true faith without wavering. *Jam. 1.* Secondly, That it be directed to Gods will. Thirdly, That it be with devout inward Motions and outward gestures (if it may be.) Fourthly, That it be not hasty, limiting God a time or manner. *Isaiah 28.* Fifthly, That it be conceived with brief words without any redundancy of speech.

9. The effects, are Union with God, joy and comfort of mind, the obtaining of good things needfull.

10. The Circumstances, are the place, now free. *Joh. 4.* publike, or private; the time also free, at all hours, &c.

11. The things connexed unto it, are, purity of life, sobriety, tentations of the Devil much to be resisted.

12. The Division, is by circumstance of the place, publike or private: By the object: it is supplication (*ἑνός*) Prayer (*προσευχή*) Intercession (*ἐντευχίς*)

13. The things akin unto it, are, diligent reading of the Scripture, Meditation of holy things, continual diligence in the works of our calling.

14. The contraries, are, A corrupt conscience, an unclean life, doubting, profaness, and contempt, blasphemy and execration.

And thus much of the primary handling of a perfect Theme.

The Secondary, is when the Definition of a Theme is put at the first beginning, and afterwards is resolved and explained by parts: This way is commonly used of many in their

their treatises : And though it be good, yet is it not so artificial and profitable as the former.

Now followeth the handling of Imperfect Themes.

Imperfect Themes, are they that are imperfectly placed in the Predicaments and Order of things.

Imperfect Theme.

And they are imperfect, either { In respect of our understanding.
Of their own Nature.

In respect of our understanding, onely the nature of the most high God cannot perfectly be treated of & explained.

Of its own nature, a { 1 A singular thing.
2 A Part.
Theme Imperfect { 3 A Concrete.
is five-fold, { 4 A Collective.
5 A Privation.

A Singular thing or *Individuum*, is either { Substantial, a
Accidental, b

Substantial hath these Canons.

1 Among substantial Themes, those chiefly come to be handled in use which are called *persons*.

2 The Genus and Species are, in secret thought, presupposed in singulars.

3 The persons name, and Etymologie, and reason of the giving of it, is to be considered.

4 Then comes to be considered the efficient cause, or beginning and birth of the person, with the Circumstances of place and Countrey, of time when; and then the subjects of this birth, his Father and Mother.

5 These are to be told; the accidents of the person ; First, Pertaining to his body ; as Stature, and Health. Secondly, to his minde ; as Wit, Judgement, Memory, Learning ; Also Moral Vertues, Chastity, Liberality, &c. And these may be led along his ages, as his childhood, youth, mans age,

6 The effects of the person are to be recited, what memorable things he hath done in every age, especially in his manhood.

7 Let the things which are akin be shewed, as they that live in his time, his friends, and the things wherein the person most delighteth.

8 Finally, let the diverse things and contrary to the person, be rehearsed, as Foes, Enviars; and his death with the cause thereof, as the disease; or if it were violent, by what adversity he perished; Then the things connex to his death, if any strange signes went before: or if he spake any memorable thing at last; whereto adde the consequents of his death, as his Burial and Funerals.

[b] A singular accident, is, which cleaves to a singular substance, as either the quality, or action, or Passion, or Relation of it.

The Canons for handling this Theme are these.

1 Let the name be weighed, as was in a theme universal,

2 Let the Genus and Species of the propounded theme be presupposed.

3 The Subject, namely, the singular substance is to be considered; as also the Object about which it is occupied.

4 Let the antecedents, connexes, adjacents, and circumstances specially be explained.

5 Let the causes Efficient, both Principal, and Impulsive, and Instrumental be diligently discussed, and the final cause also added.

6 Let the description be gathered, by naming of the Species, assignation also of the subject, object, circumstances of time and place, with mention also of the efficient and final causes.

7 Let the proper Requisites and Effects be added.

8 Let the Consequents be named.

9 Let the things akin be rehearsed,

10 Let the things diverse be compared, and the opposites at last assigned.

For example, Let Christs ascension be the theme to be handled,

1 Ascension is the scansion or moving from an inferiour place to a superiour.

2 The Genus of it is a motion local, whose extreame are from what, and unto what, and then the mean by which the moving is made. Now here we are to mind whether Christs

Ascension

Ascension be a Natural moving, or Supernatural. And we may find it to be a Naturall moving, First, In respect of the Subject, which is a natural Body. Secondly, and in respect of the terms and mean. But in respect of the Efficient cause and end, it is Supernatural.

3 The Subject of this ascension, is Christs whole person; not absolutely, but restrictively, according to that part which could move from place to place, which is his humane nature. As for the Object, Local moving is not occupied about it.

4 The *Antecedents* far off, were Christs Ministry, and all that he did in his life; the nearer, are his Passion, Resurrection, conversing after with his Disciples forty dayes, and bringing of them to *Mount-Olivet*. &c. The *Connexes*, are the term from whence; Namely, *Mount-Olivet*: The term whereto, namely, the Heaven of Heavens. The means by which, are the Air, and Sphere of fire, and other Orbs, thorow which his Body went. The Circumstance of places agrees with the terms; The time was forty dayes after his Resurrection: The other *Connexes*, were, the gazing of his Disciples, the appearing of the *Angels*, &c.

5 The principal Efficient cause, was the vertue of the Godhead, the inward moving cause (*πρηνυαυδον*) is Christs love to his Elect: The outward moving cause (*πρηναταρ-σιν*) is the profit and salvation of his Elect. The final cause in respect of Christ, is, the full possession of glory. Secondly, In respect of his Elect, to fulfill his kingly office, by defending and ruling of his Church; Also, his Prophetical and Priestly office, by sending the holy Ghost to teach them, and the interceding for them with the Father.

6 Hereupon the *Description* ariseth, this, That Christs ascension was a Local moving, whereby he, as touching his body, leaving the earth on *Mount-Olivet*, came thorow all the Regions of the Elements by vertue of the Godhead into the glorious Heaven to possesse full glory, and to defend his Church against all Enemies, and by the power of the holy Ghost from Heaven to teach and instruct, and by *Intercession* to commend us to the Father.

7 The *Effects* of his ascension, are, the sending of the holy Ghost, the gathering of his Church by the Ministry of his Apostles; the suppressing of the Enemies, and defence of his Church; sitting on Gods right hand, and *Intercession*.

8 The

8 The Consequent of his Ascension, was, the Apostles wondering, and returning to *Jerusalem*; Fear, and dwelling together: till the Spirit was sent down.

9 The things *akin* to his Ascension, were, his Resurrection, the ascending of *Enoch*, and especially of *Elias*.

10 *Diversity* may be shewed between those; for the ascension of *Enoch* and *Elias* was not a Victory over sin and the Devil; nor a triumph of merit, but of grace; not by their own power, but by anothers, &c. And the Opposites of his ascension, are, His base estate on earth, and that disparition & vanishing away, which Ubiquitaries feign of his Body, &c. And thus much of the handling of a singular accident.

2

The handling of a *Part* hath these Canons.

1 Let the name of the part in several tongues be considered, and the Notation shewed.

2 Because every Part is a thing *Incomplete*, a complete Genus or Species of it cannot be had, but it must be referred unto the predicament in which the whole is: therefore, by Comparison to the whole, and Relation to the whole, the Nature of the Part is of our understanding to be conceived; For every part is part of the whole; and if it be cut from the whole, it deserves almost no consideration, because the use of it is ceased.

3 It must be considered whether the part be Essential, or Integral.

4 If the part be Essential, let it be minded whether it be the *Form*, or the *Matter*: If the *Form*, it must chiefly be explained by his Operations, or Forces, and Effects. If it be the *Matter*, the disposition of it must be considered, by which it is apt to receive the *Form*, and so the Instruments by which the operations of the Form are wrought; and so let the whole body be subdivided into parts greater and principal, lesser and least of all.

5 Let it be considered, whether the Integral part be similar, or dissimilar: For Similars come rarely under consideration, because it is of the same name, nature, and properties with the whole, but dissimilars are wont chiefly to deserve explication.

6 In every part therefore, besides the name, there must be considered 1 The quantity and figure; 2 The quality or temperature. 3 The situation, and how it is placed, and knit

knit with other parts. 4 The uses or actions of the parts, for whose sake this Instrument is of Nature made. 5 The lesser parts of which it is compounded.

7 After this, let the things akin to the part be weighed as are other parts like unto it; and finally let the Opposites be added, as are in mans body, the peculiar diseases of the parts.

The use of this Doctrine of the Part is chiefly seen in anatomies, and in astronomy, and architecture or building; But most of all in the anatomy, and parts of a mans body.

A Concrete accident is explained chiefly by these Canons.

1 Besides the ambiguity of the name, and the Etymologie, let the *Absolute* accident be considered of which the *Concrete* is denominated, because the resolution of the *Concrete* into the *Absolute* is the best explication of the *Concrete*.

2 In the accident absolute, whereinto the *Concrete* is resolved; let the Genus, Causes, Objects, Effects, Things akin, and Opposites be considered, and let them be applied to the *Concrete* accident after the same manner.

3 In relations, concretes are often wont to be taken for absolutes, by the unheedy: therefore, there needeth great discretio.

4 When the nature of the absolute accident is perceived, the description of the *Concrete* may be annexed, viz. that which is builded by the consideration of the absolute.

Collectives are diverse things, especially substances united together, not by any essentiall Band, but by Number and Relation.

The Canons for explaining Collectives, are these.

1 Besides the Name, consider whether the Collection be made of many accidents, or of Substances.

2 Consider whither unto those many Subjects gathered together, there cleave any Relation, and then that Relation is to be explained by the Precepts given before.

For example, To treat of the Church, which is a collection of many singular persons, 1 Consider the name in Hebrew, Greek, and other Languages; And then mind it after a double kind. 1 In respect of the Material thing. 2 And in respect of the Formal. The Material of the Church, be Gods people: therefore, the Church may after a sort be referred unto Substance: And after a sort to quantity, or Number. But because to this Number there cleaves a Relation, therefore first of all thou must turn thy minde to Relation: For the Church is the *Communion of Saints*; and all
Communion

Communion is Relation. Now the Relation of the Church is twofold, 1 Of the members to the head, 2 And of the members one to another: therefore, the Church may be defined, The company of the Elect united in one head Christ, and one with another in the Bond of the Holy Ghost, unto the fruition of eternal Salvation.

A Privative Theme hath these Canons.

1 Besides the name, consider the Genus of that thing whose Privation is propounded, to wit, so as that there may be a calling back unto the Habit.

2 Then let the description of the Privation be added, the Privative causes being added to the denial of the habit, and the Subject wherein the privation is.

3 Things akin and repugnant, may so be added in Privatives, that it may be thought the opposition of the privation is perfection.

And thus much of the handling of a simple Theme.

A conjoynd Theme, is, which is combined of simples; So as it is made the matter and object of the second and third function which the reason or understanding of man exerciseth.

The handling of a conjunct Theme, according to the second part of Logick, is, which combineth and constituteth some proposition or sentence.

The Canons hereof are these.

1 Let the antecedent and consequent of the proposition be rightly ordered, each one in his place.

2 Let the Negative Particle to make a Negative Proposition, be put in that place where the Band of the Affirmation may be broken.

3 Let the note of universality be rightly placed, & shewed, whether it be absolute or limited, distributive or collective.

4 Let the consequent rightly be restrained and limited to the antecedent.

5 Let the Conjunctions, specially the conditionals rightly be distinguished in the proposition from the other parts.

6 Let a conditional proposition be revoked by cogitation of the mind unto a simple proposition.

7 Let the sentence constituted be rightly reciprocate and turned.

8 Let an improper proposition be reduced to a proper.

9 Let a contingent proposition be called to a necessary.

10 Let

To Let it be considered unto what Discipline the proposed sentence doth pertain : Which may be learned by the Nature of the simple terms in the proposition ; For if these be Theological, the proposition belongs to Theologie : If Political, to Politicks, and so the rest.

And this may suffice for the handling of a conjoynt theme, by the Instruments of the second part of Logick.

The handling or generation of ζ Syllogistical. *a*
the third part, is either ζ Methodical. *b*

Syllogistical, is, when any probleme or conjoynt proposition is handled by confirming, or refuting, that the truth, if it be unknown, may be found out : if obscure, may be declared ; if doubtfull, may be confirmed.

And this handling of Logick, is called *Disputation*.

Disputation is ζ Solitary. *1 **
either ζ Social. *2 **

Solitary disputation, is when our selves secretly treat of any controverted Probleme, or question, the adversary being not present, or instant.

In this, two things are to be considered. *1* The question it self, or state of the controversie. *2* The manner of confirming and refuting.

The question (or Probleme) is the matter subjected to Disputation. The Canons of this matter are these.

1 Let not the matter propounded to be disputed of, violate Piety and Religion. (As, whether there be a God, whether Parents are to be honoured, &c.)

2 Let it not be of things plainly manifest, & without doubt.

3 Let it be profitable, grave, not inept, or ridiculous.

4 Let it not exceed the capacity of mans mind.

5 Let it be framed with words perspicuous, and not ambiguous.

6 Let it be such as is this day controverted.

A Probleme propounded to be ζ Perfect.

disputed of, is either ζ Imperfect.

Perfect is, whose terms are Universal, so as they may be proved, or disproved, by necessary and artificial arguments.

Imperfect, is, whose terms are singular, so as they have need to be proved ; chiefly by Inartificial arguments taken from authority of Writers, or from testimony of the senses.

The handling of a Probleme, ζ Primary.

is either ζ Secondary.

Primary

Primary, is, which is instituted according to these Canons.

1 Let the state of the controversie be rightly constituted, and without all ambiguity, by choosing the Affirmant, or Negant Thesis which thou wilt defend.

2 Let a full precognition of the future proving and refuting be instituted by definition of the Antecedent & Consequent; Also by fit Limitations and Distinctions which are the future Principles of all the disputation to come.

3 Let the propounded Thesis be confirmed by arguments, 1 Artificial, drawn from the nature of the Antecedent and Consequent. 2 By Inartificial, that is, Testimonies and Authorities.

4 After confirmation let our Adversaries Thesis be set down directly opposite to our Thesis.

5 Let a Refutation be added, both of the Distinctions by which they answer unto our arguments, and also of the adversaries Objections.

6 Let the proved Thesis be repeated, and let the Consequences (*ποσειματα*) be gathered from the conclusion, confirmed by the arguments.

2 * Sociall disputation hath in it two parts, one of the Opponent, the other of the Answerer.

The Canons of these parts, some are common to both parts, and some proper to each of them.

The common Canons are six.

1 Let there be brought unto disputation a good intention of the mind, which seeks not glory, but truth.

2 Let the mind be pure from all prejudices.

3 Let the disputers agree whether of them shall oppose, or answer.

4 Let both parties bind themselves to the Laws and Rules of Logick.

5 Let them agree between themselves of certain fore-known Principles.

6 Let brevity and plainnesse be kept in opposing, and answering all ambiguities, and Ambages of Oratorious Declamations be avoided.

The Canons of the Opponent are six.

1 The Opponents parts are two: 1 To move the objection. 2 To insist upon the solution given.

2 As touching moving the question, let the position diligently be weighed, against which thou wilt oppose.

3 The

3 The position being carefully weighed, let the mean terms be brought forth for that conclusion thou desirest to infer, from the nature of the Antecedent and Consequent, and then also from testimony of chief Authors; Yet having withal a choice of arguments.

4 Let the arguments be clearly and briefly included in a Syllogistical Form.

5 Let the Opponent use a double kind of argumentation; Direct, or Offensive, and then that which leadeth to absurdity; and let him prefer this oft times before the other.

6 If either of the premises in the Syllogism need manifest proof, let not the Opponent expect until the proof of the Major, or Minor be required; But let himself by and by confirm his proposition by making a Prosyllogism.

The Opponents duty in urging, or insisting on the Objection, hath these Canons.

1 Having heard the answer to the objection, let the Opponent in secret thought examine with himself, whether it be unto the Form, or the Matter.

2 If the Form of the argument be refused, let the Rule of Logick, against which it faulteth, be required; and if he acknowledge it to be a fault, let him urge it no more: For it is childish to go about to defend a naughty Form of Syllogism.

3 If answer be given to the matter, as for the most part it is, he must look whether it be by the distinction of an ambiguous Word, or a Limitation, or a Denial; And if it be none of these, let the Answerer be minded to deal Logically, and to use some certain form of Answer, which is fitting unto either of the Premises.

4 If the Answer be by Distinction, let it be examined by the Rules and Laws of a good Distinction, set down in the Frame of Logick, and let the like be done for Limitation.

5 Let there be endeavor also that from the answer given there be a Syllogism made leading to absurdity: Name'y, so that the sum of the answer be put in place of the Minor, and some other proposition manifestly true in place of the Major; from which an absurd conclusion being inferred, may convince the answer to have been evil.

And thus much for the Opponents duty.

The Answerer is either Inferior, or Superior.

The Inferior Answerer, is he that absolutely is so called, as that

that hath propounded the Thesis to dispute of.

The *Answerers* duty, is both to assume the argument, and to solve it.

The taking of the argument hath two Canons.

1 Let the *Answerer* diligently look that he take the argument faithfully without any Circumlocutions; and for that purpose let him take to himself some leisure.

2 If the argument be not formed by the Opponent, let him bid it to be formed; and if he cannot form it, let the Objection be rejected; or if the Form of the argument be not plainly desperate, let the *Answerer* himself form it.

His other Duty to *Solve*, hath these Canons.

1 When the Form is agreed of, let first the conclusion be minded, as whether the Opponent hath rightly formed the state of the controversie: and whether he hath lawfully opposed his position or conclusion unto our position.

2 If the conclusion be rightly framed, Let the minde have recourse straightway to the Major Proposition: As, weigh whether it be true, and whether it be simply true, or but after a sort, and whether it be compounded, having a faulty knitting or composition.

3 Let the *Answer* never be by denial, if the argument may be by Distinction and Limitation.

4 The Minor Proposition seldom comes to be limited, or distinguished, but often to be denied.

5 Let not the *Answerer* rashly reject the authorities of famous men, but deal thus. 1 Let him cause their words faithfully to be recited. 2 Let him reconcile them what he can to his sentence. 3 If he cannot, then let him oppose the authority of another man as famous as he, or more.

6 To a direct *Answer*, which is so to be made as we now have shewed, let there be sometime added an indirect *answer*, as, chiefly a Retortion, whereby we shew how the Adversaries argument maketh for us.

The duties of the Superiour Answerer or President, are two, to Rule, and to Help.

For *Ruling*, Let the President diligently attend whether they dispute to the purpose, and abide in the matter that is within the lists of Disputation: which if it be not done, let him warn both the Opponent and *Answerer* of their duty.

For *Help*, If the *Answerer* fail, let the President shew a more solid and firm answer; Yet, without the *Answerers* shame;

shame; But if the *Answer* give a tolerable answer, let him praise it, and explain it somewhat more fully for the Auditors sake.

And thus much for Generation, or Syllogistical handling. The Generation or handling of Method, is, whereby we frame a Method and Order to our Tractation.

Ordination therefore or Disposition, is either Particular. Universal.

Particular Ordination, is, whereby the Method is framed of any simple or conjoynd Question or Theme; This hath been treated of enough before in the Precepts of handling a single and conjoynd Theme.

Universal Ordination, is whereby the whole Discipline or Frame of any Art or Science is disposed.

The Canons hereof are these.

1. He that would orderly Frame any Discipline, let him first mind of what sort it is, either Contemplative, or Operative.

2. Necessary things which cannot by man be produced, are Delivered in Contemplative Disciplines, whose Method is called Compositive.

3. He therefore that would dispose a Contemplative Discipline, must proceed thus. 1. That he fore-know the Subject of it touching the name. 2. That he deliver the Principles of the Subject. 3. And that he follow the properties of the Subject which flow from the Principles or Causes.

4. Operative Disciplines are handled. 1. By the End. 2. By the Subject whereinto the end is to be brought. And 3. By the means whereby his end may be obtained. And this Method is called Resolutive, (*ἀναλυτική*).

The Operative Disciplines thus to be disposed, are, Grammar, Rhetorick, Logick, Ethics, Oeconomicks, Politicks; and the three Superior Faculties, Theologic, Law, Physick or Medicine.

For example, In the disposition of Logick, First, there is mention made of the end; Namely, The direction of mens thoughts in the knowledge of things; then the Subject of it: Namely, the three Operations of mans mind; And then that which remaineth in this Art, is all spent in handling the Instruments or means, by which this end may be obtained of man, which means are taught in the three parts of Logick.

Hitherto we have heard of handling or Generation se-

parate, or apart, which is instituted according to each of the parts of Logick.

*The way
of teach-
ing well.*

Now followeth combined generation which minglcth the use of all the parts of Logick together.

Combined generation or treating is either

In Teaching. *a*
In Learning. *b*

Teaching is of two kinds, *a* Accurate or exact, called *Acroamatical*, *a*
b Popular, called *Exoterical*, *b*

The accurate kind of Teaching is, which is instituted according to the strict Rules of Logick, and is not so much applied to the capacity of the Learner, as to the nature and distinct knowledge of the things.

The General Canons hereof are five.

1. In Teaching, three things are to be looked on.
1. The Teacher, 2. The Learner. 3. The manner of teaching.

2. Let the Teacher apply himself chiefly to the nature of that thing which he would teach; and therefore let him not choose every Learner; but one that is of a good wit, and capable of exact Doctrine.

3. The Method of teaching must be esteemed by the nature of the things and Laws of Logick, not by the pleasure of the Teacher, or capacity of the Learner.

4. Let brevity in teaching be used, such as is fittest for the nature and greatness of the thing.

5. Let the words be fitted only to the understanding and mind, not to the affections and delight.

Exact manner of teaching is either

Free. *a*

Textual. *b*

Free, is when we do not explain other mens words or writings: But we our selves propound the thing.

Of the whole Discipline. *a*

And it is either

Of some part or Theme. *b*

A whole entire Discipline is taught by these Canons.

1. Let the Teachers first care be, to perceive whether the Discipline that he will teach, be Contemplative or Operative.

2. Let the Frame of the Discipline, if it be Contemplative, be disposed according to the Precepts of Composition.
Method.

Method; if it be Operative, according to the Precepts of resolute Method.

3. After the things to be foreknown, let there be a right partition of the Discipline.

4. Let the Precepts be given in a Lawful Order by Partition, and Subpartition, by Definitions, Divisions and Canons.

5. Let the Precepts have these three Requisites, 1. That they be true, 2. That they be profitable. 3. That they be Methodically disposed.

6. Let Commentaries be added to the Precepts; But so as the Scholler may discern the difference between the Precepts and Commentaries.

A Theme is taught by these Canons.

1. Let the teacher look whether the Theme he is about to propound be Simple or Compound.

2. If it be Simple, let him handle it by a simple Method; if conjoynd, then by a conjoynt Method [Of both these, Rules have been before.]

Textual, or a strict kind of teaching, is when we declare to the Hearers any Authors text.

And this is handled both by $\left\{ \begin{array}{l} \text{Resolution.} \\ \text{Illustration.} \end{array} \right.$

Resolution, is the recognizing of those Artifices by which the Author hath handled his purpose.

Illustration, is either of Words or Things.

Words are either $\left\{ \begin{array}{l} \text{Simple.} \\ \text{Conjoynt.} \end{array} \right.$

Both of them are Illustrated $\left\{ \begin{array}{l} \text{Grammer.} \\ \text{Logick.} \end{array} \right.$ by help of

By Grammer help, the Natural meaning of words is shewed, Synonymies are compared, Constructions are weighed.

By help of Logick a doubtful word is distinguished; and a Figurative is reduced to a Proper, a dark Proposition is made clear.

The Things themselves are declared by the Essential Scope of the text propounded.

Every Text is either { Doctrinal. 1. *Didaktikos*.
 { Practical. 2.
 { Mixt. 3.

1. A Doctrinal Text, is, which is referred unto knowledge only. This is declared, 1. By revocation to some Method.
 2. By filling up those things which in the Text are wanting for the full handling of it.

2. Practical writings are declared either { Historically.
 { Rhetorically.

Historically we declare any thing, 1. By bringing like Histories, 2. By explaining the Chronology, Topography, and Prosopography (that is, description of time, place and person,) 3. And by translating the Hypothesis to a Thesis, or Particular to a General.

Rhetorical kind of Teaching pertains to popular, and consisteth chiefly in Amplifying and Augmenting: Of these it is not here further to be spoken of, they rather pertaining to Rhetorick then Logick.

And thus much for the way of right teaching.

The way of Learning well. To Learn, is to comprehend in mind those things which the Teacher propoundeth, and we in our Judgment do approve.

The manner of Learning is either { Exact.
 { Popular.

- b To Learn exactly, *Acroamaticè*, is to conform ones judgment in the comprehension of things to the Nature and Order of the things themselves, and to the exact judgment of the Teacher.

And thus men learn by these four things, 1. Attention.
 2. Ordination. 3. Selection. 4. Imitation.

1. Attention, is the attaining and firm impression of the things taught.

The Canons hereof are three.

1. Let a Teacher be chosen Methodical and perspicuous, and one that knoweth the exact manner of teaching, and is willing faithfully to communicate it with thee.

2. A living voice is alwayes to be preferred before a dead or written.

3. Let the Learner meditate with himself alone the things heard or read, and let him take occasion of speaking to others that at which he learneth.

The Ordination or ordering of studies hath these Canons.

1. Let the Study of words be discerned at first from the Study of things, and let one time be bestowed in the learning of Tongues, another in the comprehending of things.

2. On Tongues, let the flowring years of youth be bestowed: For unto these there needeth little judgement, but only memory which hath vigor in youth.

3. Because Tongues are learned for the things, and Words are only Images of things: therefore less time is to be bestowed in manly age, on words, then on things.

4. For the right ordering of the Study of any Tongue, two things are required. 1. A Methodical & dexter Frame of the Art of Grammar. 2. A Comprehension of the meaning of every word in that Tongue.

5. As for the Study of things, they are learned either in whole Disciplines, or in particular *Themes*.

6. Frames of Instrumental Disciplines must needs be learn'd before, the Principal.

7. Instrumental Disciplines pertaining to things, are Rhetorick and Logick, needful to be learned before other Disciplines: For they are the keys whereby the doors of other Disciplines are unlocked.

8. Among Principal Disciplines, one may begin with Ethicks then proceed to Physicks, Mathematicks, Metaphysicks, till at length they stay in Theology, or some other that is aimed at.

9. When the Frame of the Discipline is rightly ordered and comprehended in the mind, then come to the reading of Authors, which serve to confirm or illustrate that Discipline.

10. The Learner must diligently distinguish the Commentaries of the Precepts, from the Precepts themselves: and in the Precepts observe this Order, that he keep in mind the Definitions and Divisions, making Tables for the same use; And then, that he turn him to the Canons and Rules, and have them diligently, both in understanding and Memory.

11. Let the Learner handle one Discipline only at one time; and having done that, let him go then to another in order as before is said, beginning at the Instrumentals.

12. In the Learning, let Ardent love of the thing which

is learned be cherished in thy mind ; and that which is begun, let it be continued without interruption.

3

Selection, is whereby the things which we read in others, worthy observation; or which we our selves do find out, we dispose under certain Classes and Titles : commonly it is called the gathering of Common places.

Common places are titles Methodically disposed , unto which things read and meditated, are referred.

And they are either of $\left\{ \begin{array}{l} \text{Words.} \\ \text{Things.} \end{array} \right.$

Places of Words are either of $\left\{ \begin{array}{l} \text{Common Words.} \\ \text{Words of Art.} \end{array} \right.$

Places of common Words, are again either of $\left\{ \begin{array}{l} \text{Single.} \\ \text{Conjoynt.} \end{array} \right. \left\{ \begin{array}{l} \text{Words.} \end{array} \right.$

Places of Single words are in Lexicons, and in the Nomenclator.

Places of Conjoynt Words or Phrases, seem to be things best disposed, if you gather only the more solemn and usual Forms, either in common life, or in the faculty which thou professest according to the order of the things themselves.

Common places of Words of Art, are so gathered as the places of the things themselves.

Places of things themselves are either $\left\{ \begin{array}{l} \text{Theoretical. *} \\ \text{Practical. †} \end{array} \right.$

Theoretical, which pertain to knowledg only.

And they be either of $\left\{ \begin{array}{l} \text{Essential Precepts.} \\ \text{Commentaries.} \end{array} \right.$

Places of Precepts, are the seats of matters which are disposed in every Discipline, according to the proper Method; The matters of every Discipline are to be disposed according to the Method of the simple Question, as, that the first title be of the name of every Theme, another of the Genus, and so forward as the Order is diligently designed in the handling of a simple Theme.

Places or Commentaries pertain chiefly to Disputations and Controversies which are moved about any matter of the Frame of any Discipline.

The Canons of the common places of controversies, are.

1. The Controversies that fall about the matter, ought diligently to be severed, and the titles or places of these, from the titles of the simple things themselves lookt upon in their nature.

2. The order of the Controversies, depends upon the Order of the things.

3. Under-titles also of Controversies must be disposed according to the members of the Probleme to be handled.

4. But whether to absolute simple titles any man will subject the titles of Controversies, or assign a peculiar Volume to Controversies, that is Arbitrary, or at ones pleasure.

5. Controversies should be brought to a few, as much as may be, that in every Discipline, onely the necessary sums, and such as be this day in use, be set into a common place.

Practick places be either $\left\{ \begin{array}{l} \text{Rhetorical. a} \\ \text{Historical. b} \end{array} \right.$

By Rhetorical places here we mean not those that pertain to the Precepts of Rhetorick; But which are referred to the use and practice of the Precepts.

The Canons of gathering common places Ecclesiastical are these.

1. Let the Common places of Ecclesiastical Rhetorick

be distributed into two Volumes; Of which let the first contain places gathered for teaching, the other places that pertain to moving.

2. The first Volume of *teaching-places*, let it be so furnished, that, according to the Chapters of the Catechism, the titles of the Common places, of which the people are wont to be taught, may be noted.

3. Under these titles, let Forms be written in which any head of Religion may popularly be propounded in the mother Tongue, that the people may be taught both truly and perspicuously.

4. The other Volume of moving places, should be disposed according to the chief affections, which by Sermons are to be moved.

5. In the first place may be put the title of the motion of Repentance, which again may be divided into his undertitles.

6. Next we may come to the Affection of love and desire, or Adhortation,

7. Let the last Affection be of Joy and Consolation.

Historical places are either $\left\{ \begin{array}{l} \text{Simple.} \\ \text{Compound.} \end{array} \right.$

Simple, are examples of Vertues, Vices, Punishments, and of Rewards, whose disposition is to be made according to the Frame of Ethicks.

Compound places are titles of Aphorisms, Ethick, Oeconomick, Politick, Ecclesiastick; which (as it were Practick Conclusions) are proved by their Examples as Induction.

4 Imitation is the Conformation of the Learner unto the Image of some Notable Doctor.

Imitation is either $\left\{ \begin{array}{l} \text{Grammatical.} \\ \text{Rhetorical.} \\ \text{Logical.} \end{array} \right.$

Gramma-

Grammatical Imitation is about Words and Phrases.

Rhetorical is chiefly in Amplifying and Adorning, and it is learned in Institutes best from Rhetorical common places.

Logical Imitation, is, when we conforme our understanding unto the understanding and judgement of excellent Wits in the handling of a simple and conjoynd Theme.

And thus much of the first part of the Exercise of Logick; Namely, of Tractation or Generation.



OF

The Recognizing of a thing handled,

OR

ANALYSIS.

A Nalysis (or Resolution) is a Logical Exercise whereby the Artifices are recognized, by which the handling of any matter hath been instituted.

The General Canons of Resolution are two.

1. Every Resolution is understood by the Construction; for with what Artifices any thing is constructed or framed; with them it is also resolved or unloosed.

2. Every Analysis consisteth in two things. 1. In the knowledge of the thing or work to be resolved. 2. In the weighing the manner or Artifice whereby the work is Framed.

Analysis

Analysis is either { Grammatical.
Rhetorical.
Logical.

Grammatical resolution, is which weigheth a simple or compounded word, as touching the forming and fit knitting together for the learning of any Language.

Rhetorical resolution, is whereby the Artifices are examined of Amplifications and Adornations in any Oration, or other writing.

Logical resolution, is whereby are weighed the Artifices of Explication, Probation, and Ordination or Method: which are used of the Author in making the work.

This resolution is either { Separate. a
Combined. b

Separate, wherein the handling of one Theme is weighed apart.

And it is either of a Theme { Simple. a
Conjoynd. b

Resolution of a Simple Theme, is whereby the Artifices used in a simple Tractation are Recognized.

The Canons hereof are these: Every Resolution is either of a Theme, or of a Proposition. And when it is of a Theme, it is either of a Simple Theme, or of a Conjoynd Theme.

First of all, let the Theme itself be gathered out of the Text, as being the Object and Scope of the whole Resolution.

2. Let it be diligently minded, whether the Theme be perfect

perfect or imperfect, Singular or Universal; for hereon hangeth the applying of the Terms, which may be used in the handling of any Theme.

3. It is also to be minded to what Discipline the Theme of the propounded Text doth belong.

4. Because it seldome falls out that the Authors do explain any Theme by all the Instruments of the first Part of Logick: therefore in Resolving, the mind is to be applyed unto some certain Instruments by which the Author handled his Theme.

5. Let Amplifications be diligently severed from the Explication of the Theme, instituted by the Terms thereof.

6. Let the Terms by which a Theme is handled of an Author, be judged by the Canons of the first Part of Logick; as whether it be a Genus, a Cause, a Property, or an Effect.

Resolution of a conjoynd Theme is either of the second, or of the third Part of Logick.

Resolution of the second part of Logick, is, which turns over Sententious Texts; wherein meer propositions are contained without proofs.

Resolution of the third Part
of Logick is either.

Syllogistical. a
Methodical. b

Syllogistical Resolution, is, whereby the handling of a Conjoynt Question is unfolded, According to these Canons following.

1. Let the Propositions or Conjoynt Theme of the Author be first of all gathered out of the Text.

2. That Proposition, if it be not by the Author put in the Indicative Mood must be reduced thereunto.

We must look if the proposition be often repeated in
the

the Text; for these repetitions must be gathered into one, and counted but for one Proposition.

4. But if the Proposition be not only repeated, but also explained, or limited by the Author, that explication and limitation is to be shewed before the Resolution of the Arguments. And if the Author have not explained or limited it, and yet the Proposition needeth explanation and limitation, we our selves ought to do it.

5. Let it be considered, whether the propounded Theme be universal or singular, or whethet it be a *thesis*, or an *antithesis*.

6. Let it also be considered whether it be a Theme doctrinal, or practical.

7. After the Theme is thus considered, let the next care be of the Means by which the Theme is handled of the Author, which are Arguments either proving or refuting, or Anticipations, or unloosing of objections, or amplifications, or exaggerations.

8. Of the Arguments, We are first to mind whether they be artificial, or inartificial i.e. Testimonies.

9. Let the artificial Mean be reduced to the place of Invention; and conferred with the Antecedent and Consequent of the propounded Conclusion.

10. We must look whether any of the premises be omitted by the Author in the Text, and then he that resolveth must add them.

11. If any of the Premises be proved by a Prosyllogism, then must we use the same process in resolving the Prosyllogism that was used before in the primary Syllogism.

12. Let the confirming Arguments be distinguished from the refuting.

13. If the Author bring in a secret Objection, that also must diligently be distinguished from the Confirmation, and reduced to a syllogistical form: We must also mark how the Text answers to this Objection.

14. Let Amplifications be referred to their certain places, and Adornations to the certain Figures of Rhetorick.

Methodical Resolution, is, whereby the Arifices of Method are examined.

The Canons thereof are three.

1. As Method is Universal or Particular ; so must the Resolution also needs be made, Either according to the Parts of Universal Method, or according to the Canons of particular Method.

2. The Bonds of knitting together ; and of passing from one point to another in the Method, must in the Resolving diligently be shewed.

3. If any things occur in the Author, either superfluous, or strange from the propounded Theme ; he that resolveth must give warning of them.

And thus much of Simple Resolution or separate.

Combined Resolution, is, whereby is unfolded any Treatise made by the Author, according to more Parts of Logick.

And it is either of a whole Discipline, or of some Writing or Treatise pertaining to some Discipline.

The Resolution of a whole Discipline, is, whereby the Method of any Frame or Body of Discipline is unfolded.

The Canons of which Resolution, are these.

1. Let the *Præcognita*, or things fore-known of the proposed Discipline be so instituted, that first it may appear whether it be a Contemplative, or an Operative Discipline.

2. If it be Contemplative, then the whole Resolution must be directed to these three as to a most certain Load-star ; Namely, that first the Subject of the Discipline be enquired ; Afterwards, the Species of this Subject, and also the affections both General and Special, and then the causes or beginnings of these affections.

3. And if it be an Operative Discipline, also three things must be enquired in the Authors Writings. 1. The end that is to be got by the Operation. 2. The Subject whereunto this end is to be brought. And 3. The means by which it is to be brought in.

4. Let

4. Let the Precepts alwayes be distinguished from the Commentaries,

An Authors Treatise is Resolved by these Canons.

1. Mind, whether the writing be accurate (Acroamatical), or popular (Exoteric), or mixt.

2. Let lawful foreknowledges be made of the Efficient cause, or Author of the Writing, of the Scope of his Writing; of the Object, if it be an Epistle to any.

3. Let a general partition be made of the whole Treatise; and if it be divided into Chapters, let every Chapter be referred to his part.

4. A general Resolution being so made, then come to a particular Resolution of every Member & Chapter; wherein, when any Theme, Simple or Conjoynt is handled, let the process of the Resolution be made according to the Precepts before given of either Theme.

And thus endeth the Doctrine of the Exercise of Logick:

Blessed be God.

FINIS.

ne

),

nt

g;

se;

be

oa

re-

ed,

he

k;